

**Mail Application To:**

New Mexico Environment Department  
Air Quality Bureau  
Permits Section  
525 Camino de los Marquez, Suite 1  
Santa Fe, New Mexico, 87505

Phone: (505) 476-4300  
Fax: (505) 476-4375  
www.nmenv.state.nm.us/aqb

**For Department use only:**

AIRS No.:

## Universal Air Quality Permit Application

### Use this application for NOI, NSR, or Title V sources.

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well. For NOI applications, submit the entire UA1, UA2, and UA3 applications on a single CD (no copies are needed). For NOIs, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required.

**This application is being submitted as** (check all that apply): ☐ Request for a No Permit Required Determination (no fee)

☐ **Updating** an application currently under NMED review. Include this page and all pages that are being updated (no fee required).

**Construction Status:** ☐ Not Constructed ☒ Existing Permitted (or NOI) Facility ☐ Existing Non-permitted (or NOI) Facility

**Minor Source:** ☐ a NOI 20.2.73 NMAC ☐ 20.2.72 NMAC application/revision ☐ 20.2.72.300 NMAC Streamline application

**Title V Source:** ☐ Title V (new) ☐ Title V renewal ☐ TV minor mod. ☐ TV significant mod. TV Acid Rain: ☐ New ☐ Renewal

**PSD Major Source:** ☐ PSD major source (new) ☒ minor modification to a PSD source ☐ a PSD major modification

**Acknowledgements:** ☒ I acknowledge that a pre-application meeting is available to me upon request ☐ NPR (no fee)  
☒ \$500 NSR Permit Filing Fee enclosed OR ☐ The full permit fee associated with 10 fee points (required w/ streamline applications).  
☒ Check No.: 009166 in the amount of \$500 (Fee not required for Title V) ☐ This facility meets the applicable requirements to register as a Small Business and a check for 50% of the normal fee is enclosed (only applicable **provided** that NMED has a Small Business Certification Form from your company on file found at: [http://www.nmenv.state.nm.us/aqb/permit/app\\_form.html](http://www.nmenv.state.nm.us/aqb/permit/app_form.html)).

**Citation:** Please provide the **low level citation** under which this application is being submitted: **20.2.72.200.A(2) NMAC**. (i.e. an example of an application for a new minor source would be 20.2.72.200.A NMAC, one example of a low level cite for a Technical Revision could be: 20.2.72.219.B.1.b NMAC, or a Title V acid rain cite would be: 20.2.70.200.C NMAC)

**Synthetic Minor Source Information:** A source is synthetic minor if its uncontrolled emissions are above major source applicability thresholds, but the facility is minor because it has federally enforceable requirements (federal requirements or permit conditions) that limit controlled emissions below major source thresholds. Facilities can be synthetic minor for either Title V (20.2.70 NMAC) or PSD (20.2.74 NMAC) or both. The Department tracks synthetic minor sources that are within 20% of either TV or PSD major source thresholds, referring to these as Synthetic Minor 80 Sources (abbreviated SM80). Please check all that apply:  
Prior to this permitting action this source is a ☐ TV major source, ☐ a TV synthetic minor source, ☐ a TV SM80 source.  
Prior to this permitting action this source is a ☐ PSD major source, ☐ a PSD synthetic minor source, ☐ a PSD SM80 source.  
This permitting action results in a ☐ TV synthetic minor source and/or ☐ PSD synthetic minor source.

## Section 1 – Facility Information

### Section 1-A: Company Information

		AI # (if known): 25726	Updating Permit/NOI #: PSD 3449-M2
1	Facility Name: Hobbs Generating Station		Plant primary SIC Code (4 digits): 4911
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 98 N. Twombly Lane, Hobbs, NM 88242		
2	Plant Operator Company Name: CAMS (New Mexico), LLC		Phone/Fax: (575) 397-6706 / (575) 397-6793
a	Plant Operator Address: 98 N. Twombly Lane, Hobbs, NM 88242		
b	Plant Operator's New Mexico Corporate ID or Tax ID: 260471741		
3	Plant Owner(s) name(s): Lea Power Partners, LLC, c/o Mr. David Baugh		Phone/Fax: (713) 358-9733 / (713) 358-9730

a	Plant Owner(s) Mailing Address(s): <b>98 N. Twombly Lane, Hobbs, NM 88242</b>	
4	Bill To (Company): <b>Mr. Roger Schnabel</b>	Phone/Fax: <b>(575) 397-6706 / (575) 397-6793</b>
a	Mailing Address: <b>98 N. Twombly Lane, Hobbs, NM 88242</b>	E-mail: <b><a href="mailto:rschnabel@camstex.com">rschnabel@camstex.com</a></b>
5	<input type="checkbox"/> Preparer: <input checked="" type="checkbox"/> Consultant: <b>CAMS eSPARC, Mona Caesar Johnson, P.E.</b>	Phone/Fax: <b>(281) 333-3339/ (281) 333-3386</b>
a	Mailing Address: <b>1110 Nasa Parkway, Suite 212, Houston, TX 77058</b>	E-mail: <b><a href="mailto:mjohnson@camsesparc.com">mjohnson@camsesparc.com</a></b>
6	Plant Operator Contact: <b>Mr. Roger Schnabel</b>	Phone/Fax: <b>(575) 397-6706 / (575) 397-6793</b>
a	Address: <b>98 N. Twombly Lane, Hobbs, NM 88242</b>	E-mail: <b><a href="mailto:rschnabel@camstex.com">rschnabel@camstex.com</a></b>
7	Air Permit Contact: <b>Mr. Roger Schnabel</b>	Title: <b>Plant Manager</b>
a	E-mail: <b><a href="mailto:rschnabel@camstex.com">rschnabel@camstex.com</a></b>	Phone/Fax: <b>(575) 397-6706 / (575) 397-6793</b>
b	Mailing Address: <b>98 N. Twombly Lane, Hobbs, NM 88242</b>	

### Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.b If yes to question 1.a, is it currently operating in New Mexico? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Is the facility currently shut down? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, give month and year of shut down (MM/YY):
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: <b>P-244-M4</b>
7	Has this facility been issued a No Permit Required (NPR)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: <b>PSD 3449-M2</b>
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the register No. is:

### Section 1-C: Facility Input Capacity & Production Rate

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: <b>3,830 MMBtu/hr (LHV)</b>	Daily: <b>91,920 MMBtu/Day (LHV)</b>	Annually: <b>29,535,551 MMBtu/yr (LHV)</b>
b	Proposed	Hourly: <b>4,054 MMBtu/hr (LHV)</b>	Daily: <b>97,296 MMBtu/Day (LHV)</b>	Annually: <b>29,707,364 MMBtu/yr (LHV)</b>
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: <b>600 MW nominal</b>	Daily: <b>14,400 MW nominal (Hourly * 24)</b>	Annually: <b>5,256,000 MW nominal (Daily * 365)</b>
b	Proposed	Hourly: <b>625 MW nominal</b>	Daily: <b>15,004 MW nominal (Hourly * 24)</b>	Annually: <b>5,476,489 MW nominal (Daily * 365)</b>

**Section 1-D: Facility Location Information**

1	Section: <b>24</b>	Range: <b>36E</b>	Township: <b>18S</b>	County: <b>Lea</b>	Elevation (ft): <b>3,716</b>
2	UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13			Datum: <input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): <b>658,413 m E</b>			UTM N (in meters, to nearest 10 meters): <b>3,622,425 m N</b>	
b	AND Latitude (deg., min., sec.): <b>32° 43' 47.07" N</b>			Longitude (deg., min., sec.): <b>103° 18' 34.6" W</b>	
3	Name and zip code of nearest New Mexico town: <b>Hobbs, 88240</b>				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): <b>From Hobbs, drive approximately 7 miles west on the Carlsbad Highway, and turn north just before mile marker 95. Drive north for approximately 1.7 miles passing the Maddox Station on the left, and turn west for 0.3 miles. After passing through an access gate, drive north approximately 0.5 miles to the LPP site location.</b>				
5	The facility is <b>8 miles West</b> of <b>Hobbs, NM</b> .				
6	Status of land at facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Federal BLM <input type="checkbox"/> Federal Forest Service <input type="checkbox"/> Other (specify)				
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: <b>Hobbs, Lea County, NM and Gaines County, TX</b>				
8	<b>20.2.72 NMAC applications only:</b> Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see <a href="http://www.nmenv.state.nm.us/aqb/modeling/classIareas.html">www.nmenv.state.nm.us/aqb/modeling/classIareas.html</a> )? <input type="checkbox"/> Yes <input type="checkbox"/> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: <b>N/A</b>				
9	Name nearest Class I area: <b>Carlsbad Caverns National Park</b>				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): <b>116.2 km</b>				
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: <b>1,680 m from Maddox Station.</b>				
12	Method(s) used to delineate the Restricted Area: <b>Continuous Fencing.</b>  "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.				
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.				
14	Will this facility operate in conjunction with other air regulated parties on the same property? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, what is the name and permit number (if known) of the other facility?				

**Section 1-E: Proposed Operating Schedule** (The 1-E.1 & 1-E.2 operating schedules may become conditions in the permit.)

1	Facility <b>maximum</b> operating ( $\frac{\text{hours}}{\text{day}}$ ): <b>24</b>	( $\frac{\text{days}}{\text{week}}$ ): <b>7</b>	( $\frac{\text{weeks}}{\text{year}}$ ): <b>50</b>	( $\frac{\text{hours}}{\text{year}}$ ): <b>8,400</b>
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$ )? Start: <b>N/A</b>		AM PM	End: <b>N/A</b> <input type="checkbox"/> AM <input type="checkbox"/> PM
3	Month and year of anticipated start of construction: <b>N/A.</b>			
4	Month and year of anticipated construction completion: <b>N/A.</b>			
5	Month and year of anticipated startup of new or modified facility: <b>N/A.</b>			
6	Will this facility operate at this site for more than one year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

**Section 1-F: Other Facility Information**

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, specify:		
a	If yes, NOV date or description of issue:	NOV Tracking No:	
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide the 1c & 1d info below:		
c	Document Title:	Date:	Requirement # (or page # and paragraph #):
d	Provide the required text to be inserted in this permit:		
2	Is air quality dispersion modeling being submitted with this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
a	If Yes, what type of source? <input type="checkbox"/> Major ( <input type="checkbox"/> ≥10 tpy of any single HAP <b>OR</b> <input type="checkbox"/> ≥25 tpy of any combination of HAPS) <b>OR</b> <input checked="" type="checkbox"/> Minor ( <input checked="" type="checkbox"/> <10 tpy of any single HAP <b>AND</b> <input checked="" type="checkbox"/> <25 tpy of any combination of HAPS)		
b	If 4.a is Yes, identify the subparts in 40 CFR 61 & 40 CFR 63 that apply to this facility (If no subparts apply, enter "N/A."): N/A		

**Section 1-G: Streamline Application**

(This section applies to 20.2.72.300 NMAC Streamline applications only)

1	<input type="checkbox"/> I have filled out Section 18, "Addendum for Streamline Applications." <input checked="" type="checkbox"/> N/A (This is not a Streamline application.)
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**Section 1-H: Title V Specific Information**

(Fill this section out only if this is a Title V application.)

1	Responsible Official (20.2.70.300.D.2 NMAC):		Phone:
a	R.O. Title:	R.O. e-mail:	
b	R. O. Address:		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC):		Phone:
a	A. R.O. Title:	A. R.O. e-mail:	
b	A. R. O. Address:		
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship):		
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.):		
a	Address of Parent Company:		
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.):		
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations:		
7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers:		



## Section 1-I – Submittal Requirements

Each 20.2.73 NMAC (NOI), a 20.2.70 NMAC (Title V), a 20.2.72 NMAC (NSR minor source), or 20.2.74 NMAC (PSD) application package shall consist of the following:

### Hard Copy Submittal Requirements:

- 1) One hard copy **original signed and notarized application package printed double sided ‘head-to-toe’ 2-hole punched** as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be **head-to-head**. If ‘head-to-toe printing’ is not possible, print single sided. Please use **numbered tab separators** in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required.
- 2) If the application is for a NSR or Title V permitting action, include one working hard **copy** for Department use. This **copy** does not need to be 2-hole punched. Technical revisions only need to fill out Section 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical revision. TV Minor Modifications need only fill out Section 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.
- 3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically on compact disk(s) (CD). For permit application submittals, **two CD** copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a **single CD** submittal.
- 4) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver OR** one additional electronic copy of the air dispersion modeling including the input and output files. The dispersion modeling **summary report only** should be submitted as hard copy(ies) unless otherwise indicated by the Bureau. The complete dispersion modeling study, including all input/output files, should be submitted electronically as part of the electronic submittal.
- 5) If subject to PSD review under 20.2.74 NMAC (PSD) include,
  - a. one additional hard copy and one additional CD copy for US EPA,
  - b. one additional hard copy and one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
  - c. one additional hard copy and one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

### Electronic Submittal Requirements [in addition to the required hard copy(ies)]:

- 1) All required electronic documents shall be submitted in duplicate (2 separate CDs). A single PDF document of the entire application as submitted and the individual documents comprising the application.
- 2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc.), submit these items in hard copy format with the number of additional hard copies corresponding to the number of CD copies required. We must be able to review the formulas and inputs that calculated the emissions.
- 3) It is preferred that this application form be submitted as 30003 electronic files (**2 MSWord docs**: Universal Application section 1 and Universal Application section 3-19) and **1 Excel file** of the tables (Universal Application section 2) on the CD(s). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 4) The **electronic file names** shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: “A-3423-FacilityName”. The “A” distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with “A-”. Modifications to existing facilities should use the **core permit number** (i.e. ‘3423’) the Department assigned to the facility as the next 4 digits. Use ‘XXXX’ for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: “A-3423-9-description”, where “9” stands for the **section #** (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the **header information** throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision # (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. The footer information should not be modified by the applicant.

**Table of Contents**

<b>Section 1:</b>	<b>General Facility Information</b>
<b>Section 2:</b>	<b>Tables</b>
<b>Section 3:</b>	<b>Application Summary</b>
<b>Section 4:</b>	<b>Process Flow Sheet</b>
<b>Section 5:</b>	<b>Plot Plan Drawn to Scale</b>
<b>Section 6:</b>	<b>All Calculations</b>
<b>Section 7:</b>	<b>Information Used to Determine Emissions</b>
<b>Section 8:</b>	<b>Map(s)</b>
<b>Section 9:</b>	<b>Proof of Public Notice</b>
<b>Section 10:</b>	<b>Written Description of the Routine Operations of the Facility</b>
<b>Section 11:</b>	<b>Source Determination</b>
<b>Section 12:</b>	<b>PSD Applicability Determination for All Sources &amp; Special Requirements for a PSD Application</b>
<b>Section 13:</b>	<b>Discussion Demonstrating Compliance with Each Applicable State &amp; Federal Regulation</b>
<b>Section 14:</b>	<b>Operational Plan to Mitigate Emissions</b>
<b>Section 15:</b>	<b>Alternative Operating Scenarios</b>
<b>Section 16:</b>	<b>Air Dispersion Modeling</b>
<b>Section 17:</b>	<b>Compliance Test History</b>
<b>Section 18:</b>	<b>Addendum for Streamline Applications (streamline applications only)</b>
<b>Section 19:</b>	<b>Requirements for the Title V (20.2.70 NMAC) Program (Title V applications only)</b>
<b>Section 20:</b>	<b>Other Relevant Information</b>
<b>Section 21:</b>	<b>Addendum for Landfill Applications</b>
<b>Section 22:</b>	<b>Green House Gas Applicability</b>
<b>Section 23:</b>	<b>Certification Page</b>

**Table 2-A: Regulated Emission Sources**

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

Unit Number <sup>1</sup>	Source Description	Manufacturer	Model #	Serial #	Maximum or Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture or Reconstruction <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	Applicable State & Federal Regulation(s) (i.e., 20.2.X, JJJJ, ...)	Replacing Unit No.
							Date of Installation /Construction <sup>2</sup>	Emissions vented to Stack #				
HOBB-1	Combustion Turbine	Mitsubishi Heavy Industries	M501F-F4	T-487	180.3 nominal	180.3 nominal	2001 September 2008	SCR-1 CAT-1 1	20200201	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	20.2.61, 77 NSPS KKKK	N/A
HOBB-2	Combustion Turbine	Mitsubishi Heavy Industries	M501F-F4	T-488	180.3 nominal	180.3 nominal	2001 September 2008	SCR-2 CAT-2 2	20200201	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	20.2.61, 77 NSPS KKKK	N/A
DB-1	Duct Burner	Forney	Standard	913864	330 MMBtu/hr	330 MMBtu/hr	2007 August 2008	SCR-1 CAT-1 1	10200601	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	20.2.33, 61	N/A
DB-2	Duct Burner	Forney	Standard	913865	330 MMBtu/hr	330	2007 August 2008	SCR-2 CAT-2 2	10200601	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	20.2.33, 61	N/A
AC-1	Auxiliary Cooling Tower	Baltimore Air Cooler	FXV3-364-100	U014653101	1,780 gpm	1,780 gpm	2002 August 2008	N/A AC-1	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	N/A	N/A
AC-2	Auxiliary Cooling Tower	Baltimore Air Cooler	FXV3-364-100	U014653102	1,780 gpm	1,780 gpm	2002 August 2008	N/A AC-2	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	N/A	N/A
AC-3	Auxiliary Cooling Tower	Baltimore Air Cooler	FXV3-364-100	U014653103	1,780 gpm	1,780 gpm	2002 August 2008	N/A AC-3	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	N/A	N/A
IC-1	Inlet Chiller	Baltimore Aircoil	331132A	U014283404	15,448 gpm	15,448 gpm	2002 August 2008	N/A IC-1	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	N/A	N/A
IC-2	Inlet Chiller	Baltimore Aircoil	331132A	U014283405	15,448 gpm	15,448 gpm	2002 August 2008	N/A IC-2	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	N/A	N/A
IC-3	Inlet Chiller	Baltimore Aircoil	331132A	U014283406	15,448 gpm	15,448 gpm	2002 August 2008	N/A IC-3	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	N/A	N/A
FH-1	Fuel Gas Heater	Rheos	2400	A07193433	2.4 MMBtu/hr	2.4 MMBtu/hr	2008 August 2008	N/A FH-1	39990003	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	20.2.61	N/A
FH-2	Fuel Gas Heater	Rheos	2400	A07193435	2.4 MMBtu/hr	2.4 MMBtu/hr	2008 August 2008	N/A FH-2	39990003	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	20.2.61	N/A
FH-3	Fuel Gas Heater	Rheos	2400	A07193434	2.4 MMBtu/hr	2.4 MMBtu/hr	2008 August 2008	N/A FH-3	39990003	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	20.2.61	N/A
G-1	Standby Generator	Volvo Penta	D1641GEP	D16*021102* C3*A	565 kW (758 hp)	565 kW (758 hp)	2008 August 2008	N/A G-1	20100102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	20.2.61, 77, 82 NSPS IIII MACT ZZZZ	N/A
FP-1	Diesel Fire Pump	Detroit Diesel	PDFFP06 FA-IIV	6VF-300006	443 hp	443 hp	2001 2001	N/A FP-1	20100102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	20.2.61, 82 MACT ZZZZ	N/A

<sup>1</sup> Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.<sup>2</sup> Specify dates required to determine regulatory applicability.<sup>3</sup> To properly account for power conversion efficiencies, generator set rated capacity shall be reported as the rated capacity of the engine in horsepower, not the kilowatt capacity of the generator set.

**Table 2-B: Insignificant Activities<sup>1</sup> (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)**

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 20.2.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see [http://www.nmenv.state.nm.us/aqb/permit/aqb\\_pol.html](http://www.nmenv.state.nm.us/aqb/permit/aqb_pol.html)), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at <http://www.nmenv.state.nm.us/aqb/forms/InsignificantListTitleV.pdf>. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction <sup>2</sup>	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>	
T-1	Diesel Day Tank - Firewater Pump	unknown	unknown	300 gal	20.2.72.202.B(2)	unknown	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			unknown	300 gal	List Item #1.b.	unknown	
T-2	Diesel Day Tank - Standby Generator	unknown	unknown	1,250 gal	20.2.72.202.B(2)(a)	unknown	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			unknown	1,250 gal	List Item #1.b.	unknown	
T-3	Ammonia Tank	unknown	unknown	9,000 gal	20.2.72.402.C.9	unknown	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			unknown	9,000 gal	List Item #1.b.	unknown	
T-4	Caustic Bulk Storage Tank	unknown	unknown	7,000 gal	20.2.72.402.C.9	unknown	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			unknown	7,000 gal	List Item #1.b.	unknown	
T-5	Acid Bulk Storage Tank	unknown	unknown	7,000 gal	20.2.72.402.C.9	unknown	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			unknown	7,000 gal	List Item #1.b.	unknown	
T-6	Neutralization Tank	unknown	unknown	50,000 gal	20.2.72.402.C.9	unknown	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			unknown	50,000 gal	List Item #1.b.	unknown	
AE-1	Apex evaporation devices	unknown	unknown	unknown	20.2.72.402.C.9	unknown	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			unknown	unknown	List Item #1.a.	unknown	
T-7	Diesel Tank	unknown	unknown	500 gal	20.2.72.202.B(2)	unknown	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			unknown	500 gal	List Item #1.b.	unknown	
T-8	Diesel Tank	unknown	unknown	100 gal	20.2.72.202.B(2)	unknown	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			unknown	100 gal	List Item #1.b.	unknown	
T-9	Gasoline Tank	unknown	unknown	500 gal	20.2.72.202.B(5)	unknown	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			unknown	500 gal	List Item #8	unknown	
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced

<sup>1</sup> Insignificant activities exempted due to size or production rate are defined in 20.2.70.300.D.6, 20.2.70.7.Q NMAC, and the NMED/AQB List of Insignificant Activities, dated September 15, 2008. Emissions from these insignificant activities do not need to be reported, unless specifically requested.

<sup>2</sup> Specify date(s) required to determine regulatory applicability.

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions.

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**Table 2-D: Maximum Emissions** (under normal operating conditions)

☐ This Table was intentionally left blank because it would be identical to Table 2-E.

Maximum Emissions are the emissions at maximum capacity and prior to (in the absence of) pollution control, emission-reducing process equipment, or any other emission reduction. Calculate the hourly emissions using the worst case hourly emissions for each pollutant. For each pollutant, calculate the annual emissions as if the facility were operating at maximum plant capacity without pollution controls for 8760 hours per year, unless otherwise approved by the Department. List Hazardous Air Pollutants (HAP) & Toxic Air Pollutants (TAPs) in Table 2-I. Unit & stack numbering must be consistent throughout the application package. For each unit with flashing, list tank-flashing emissions estimates as a separate line item (20.2.70.300.D.5 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.B.6, & 20.2.74.301 NMAC). Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed with a minimum of two significant figures<sup>1</sup>. If there are any significant figures to the left of a decimal point, there shall be no more than one significant figure to the right of the decimal point.

Unit No.	NO <sub>x</sub>		CO		VOC		SO <sub>x</sub>		TSP <sup>2</sup>		PM10 <sup>2</sup>		PM2.5 <sup>2</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
HOBB-1 + DB-1	178.6	782.3	66.8	292.8	5.2	22.9	10.0	44.0	17.0	74.5	17.0	74.5	17.0	74.5				
HOBB-2 + DB-2	178.6	782.3	66.8	292.8	5.2	22.9	10.0	44.0	17.0	74.5	17.0	74.5	17.0	74.5				
IC-1, IC-2, IC-3*	-	-	-	-	-	-	-	-	0.70	3.0	0.35	1.5	0.001	0.01				
FH-1, FH-2, FH-3	0.39	1.7	0.24	1.0	0.04	0.16	0.04	0.18	0.05	0.22	0.05	0.22	0.05	0.22				
FP-1*	7.4	32.5	1.4	6.3	0.25	1.1	0.69	3.0	0.18	0.77	0.18	0.77	0.18	0.77				
G-1*	6.5	28.3	0.86	3.8	0.20	0.87	0.31	1.3	0.12	0.52	0.12	0.52	0.12	0.52				
AC-1, AC-2, AC-3*	-	-	-	-	-	-	-	-	0.08	0.35	0.04	0.18	0.0002	0.001				
<b>Totals</b>	<b>371.5</b>	<b>1,627.1</b>	<b>136.2</b>	<b>596.6</b>	<b>10.9</b>	<b>47.9</b>	<b>21.1</b>	<b>92.5</b>	<b>35.1</b>	<b>153.9</b>	<b>34.8</b>	<b>152.2</b>	<b>34.4</b>	<b>150.5</b>				

<sup>1</sup> Significant Figures Examples: One significant figure – 0.03, 3, 0.3. Two significant figures – 0.34, 34, 3400, 3.4

<sup>2</sup> Condensables: Include condensable particulate matter emissions in particulate matter calculations.

\* The emission increase associated with these units will be authorized through a significant revision of PSD 3449.



**Table 2-E: Requested Allowable Emissions**

Unit & stack numbering must be consistent throughout the application package. For each unit with flashing, list tank-flashing emissions estimates as a separate line item (20.2.70.300.D.5 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.B.6, & 20.2.74.301 NMAC). Fill all cells in this table with the emission numbers or a "-" symbol. A "--" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed with a minimum of two significant figures<sup>1</sup>. If there are any significant figures to the left of a decimal point, there shall be no more than one significant figure to the right of the decimal point. Please do not change the column widths on this table.

Unit No.	NOx		CO		VOC		SOx		TSP <sup>2</sup>		PM10 <sup>2</sup>		PM2.5 <sup>2</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
HOBB-1*	14.5	181.0	8.8	279.5	2.4	96.4	8.4	48.2	11.3	85.8	11.3	85.8	11.3	85.8				
HOBB-2*	14.5		8.8		2.4		8.4		11.3		11.3		11.3					
HOBB-1* + DB-1	18.1		11.0		2.8		10.7		17.1		17.1		17.1					
HOBB-2* + DB-2	18.1		11.0		2.8		10.7		17.1		17.1		17.1					
IC-1, IC-2, IC-3**									0.70	2.1	0.35	1.1	0.001	0.004				
FH-1, FH-2, FH-3	0.39	1.7	0.24	1.0	0.04	0.16	0.04	0.18	0.05	0.22	0.05	0.22	0.05	0.22				
FP-1**	7.4	0.37	1.4	0.1	0.25	0.01	0.69	0.03	0.18	0.01	0.18	0.01	0.18	0.01				
G-1**	6.5	1.6	0.86	0.21	0.20	0.05	0.31	0.08	0.12	0.03	0.12	0.03	0.12	0.03				
AC-1, AC-2, AC-3**									0.08	0.35	0.04	0.18	0.0002	0.001				
<b>Totals</b>	<b>50.5</b>	<b>184.7</b>	<b>24.5</b>	<b>280.9</b>	<b>6.2</b>	<b>96.7</b>	<b>22.4</b>	<b>48.5</b>	<b>35.3</b>	<b>88.6</b>	<b>34.9</b>	<b>87.3</b>	<b>34.5</b>	<b>86.1</b>				

<sup>1</sup> Significant Figures Examples: One significant figure – 0.03, 3, 0.3. Two significant figures – 0.34, 34, 3400, 3.4

<sup>2</sup> Condensables: Include condensable particulate matter emissions in particulate matter calculations.

\* HOBB-1 and HOBB-2 will either run with the DB or without DB.

\*\* The emission increase associated with these units will be authorized through a significant revision of PSD 3449.

**Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)**

□ This table is intentionally left blank as all SSM emissions at this facility do not require an increase in Requested Allowables greater than those listed in Table 2-E. If you are required to report GHG emissions as described in Section 21, include any GHG emissions due Startup, Shutdown, and/or Scheduled Maintenance in Table 2-P. Provide explanation in Section 6.

All applications, including NOI applications, must fill out this table, reporting Maximum Emissions during Startup, Shutdown and Scheduled Maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). **Only report SSM emissions greater than the corresponding Table 2-E emissions<sup>1</sup>.** Not providing emissions for a unit indicates that SSM emissions for this unit are less than the Requested Allowables for that unit in Table 2-E. In Section 6, provide emissions calculations for any emissions listed in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.nmenv.state.nm.us/aqb/permit/app\\_form.html](http://www.nmenv.state.nm.us/aqb/permit/app_form.html)) for more detailed instructions. For each unit with flashing, list tank-flashing emissions estimates as a separate line item (20.2.72.203.A.3 and 20.2.70.300.D.5 NMAC). List all units and SSM fugitives, except GHGs, in this table. Refer to Table 2-E for instructions on use of the “-” symbol and on significant figures.

Unit No.	NOx		CO		VOC		SOx		TSP <sup>2</sup>		PM10 <sup>2</sup>		PM2.5 <sup>2</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
HOBB-1	175.1	-	430.0	-	75.0	-	-	-	-	-	-	-	-	-				
HOBB-2	175.1	-	430.0	-	75.0	-	-	-	-	-	-	-	-	-				
<b>Totals</b>	<b>350.1</b>	<b>-</b>	<b>859.9</b>	<b>-</b>	<b>149.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>				

<sup>1</sup> For instance, if the short term steady-state Table 2-E emissions are 5 lb/hr and the SSM rate is 12 lb/hr, enter 7 lb/hr in the table below. If the annual steady-state Table 2-E emissions are 21.9 TPY, and the number of scheduled SSM events result in annual emissions of 31.9 TPY, enter 10.0 TPY in the table below.

<sup>2</sup> Condensables: Include condensable particulate matter emissions in particulate matter calculations.

Use this table to list stack emissions (requested allowable) from split and combined stacks. List Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) in Table 2-I. List all fugitives that are associated with the normal, routine, and non-emergency operation of the facility. List tank-flashing emissions estimates as a separate line item. Unit and stack numbering must correspond throughout the application package. Refer to Table 2-E for instructions on use of the “-” symbol and on significant figures.

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### Table 2-H: Stack Exit Conditions

Unit and stack numbering must correspond throughout the application package.

[illegible]

In the table below, report the Potential to Emit for each HAP from each regulated emission unit listed in Table 2-A, **only if the entire facility emits the HAP at a rate greater than or equal to one (1) ton per year**. For each such emission unit, HAPs shall be reported to the nearest 0.1 tpy. Each facility-wide Individual HAP total and the facility-wide Total HAPs shall be the sum of all HAP sources calculated to the nearest 0.1 ton per year. Per 20.2.72.403.A.1 NMAC, facilities not exempt [see 20.2.72.402.C NMAC] from TAP permitting shall report each TAP that has an uncontrolled emission rate in excess of its pounds per hour screening level specified in 20.2.72.502 NMAC. TAPs shall be reported using one more significant figure than the number of significant figures shown in the pound per hour threshold corresponding to the substance. Use the HAP nomenclature as it appears in Section 112 (b) of the 1990 CAAA and the TAP nomenclature as it listed in 20.2.72.502 NMAC. Include tank-flashing emissions estimates of HAPs in this table. For each HAP or TAP listed, fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected or the pollutant is emitted in a quantity less than the threshold amounts described above.

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**Table 2-J: Fuel**

Specify fuel characteristics and usage. Unit and stack numbering must correspond throughout the application package.

Unit No.	Fuel Type (No. 2 Diesel, Natural Gas, Coal, ...)	Specify Units				
		Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
HOBB-1	Natural Gas	932 Btu/scf	1,697 MMBtu/hr (LHV)	13,665,586 MMBtu/yr (LHV)	1.7 gr-S/100scf	0
HOBB-2	Natural Gas	932 Btu/scf	1,697 MMBtu/hr (LHV)	13,665,586 MMBtu/yr (LHV)	1.7 gr-S/100scf	0
DB-1	Natural Gas	932 Btu/scf	330 MMBtu/hr (LHV)	1,188,096 MMBtu/yr (LHV)	1.7 gr-S/100scf	0
DB-2	Natural Gas	932 Btu/scf	330 MMBtu/hr (LHV)	1,188,096 MMBtu/yr (LHV)	1.7 gr-S/100scf	0
FH-1, FH-2, FH-3	Natural Gas	932 Btu/scf	2.4 MMBtu/hr	21,024 MMBtu/yr	1.7 gr-S/100scf	0
FP-1	Diesel	19,300 Btu/lb	24.9 gph	2,490 gpy	0.0015%	0
G-1	Diesel	19,300 Btu/lb	37.2 gph	18,600 gpy	0.0015%	0



For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

[illegible]

### Table 2-L: Tank Data

Include appropriate tank-flashing modeling input data. Use an addendum to this table for unlisted data categories. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary. See reference Table 2-L2. Note: 1.00 bbl = 10.159 M3 = 42.0 gal

[illegible]

**Table 2-L2: Liquid Storage Tank Data Codes Reference Table**

Roof Type	Seal Type, Welded Tank Seal Type		Seal Type, Riveted Tank Seal Type		Roof, Shell Color	Paint Condition
<b>FX:</b> Fixed Roof	<b>Mechanical Shoe Seal</b>	<b>Liquid-mounted resilient seal</b>	<b>Vapor-mounted resilient seal</b>	<b>Seal Type</b>	<b>WH:</b> White	Good
<b>IF:</b> Internal Floating Roof	<b>A:</b> Primary only	<b>A:</b> Primary only	<b>A:</b> Primary only	<b>A:</b> Mechanical shoe, primary only	<b>AS:</b> Aluminum (specular)	Poor
<b>EF:</b> External Floating Roof	<b>B:</b> Shoe-mounted secondary	<b>B:</b> Weather shield	<b>B:</b> Weather shield	<b>B:</b> Shoe-mounted secondary	<b>AD:</b> Aluminum (diffuse)	
<b>P:</b> Pressure	<b>C:</b> Rim-mounted secondary	<b>C:</b> Rim-mounted secondary	<b>C:</b> Rim-mounted secondary	<b>C:</b> Rim-mounted secondary	<b>LG:</b> Light Gray	
					<b>MG:</b> Medium Gray	
					<b>BL:</b> Black	
					<b>OT:</b> Other (specify)	

Note: 1.00 bbl = 0.159 M<sup>3</sup> = 42.0 gal

Note:  $1.00 \text{ bbl} = 0.159 \text{ M}^3 = 42.0 \text{ gal}$

**Table 2-M: Materials Processed and Produced** (Use additional sheets as necessary.)

[illegible]

Enter Continuous Emissions Measurement (CEM) Data in this table. If CEM data will be used as part of a federally enforceable permit condition, or used to satisfy the requirements of a state or federal regulation, include a copy of the CEM's manufacturer specification sheet in the Information Used to Determine Emissions attachment. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

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### Table 2-O: Parametric Emissions Measurement Equipment

Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

[illegible]

**Table 2-P: Green House Gas Emissions**

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC that are Major for GHGs as determined in Section 22 of this application are required to complete this Table if so directed in Section 22 or are major for GHGs and have an existing GHG BACT. Applicants must report potential emission rates in short tons per year. **Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table.**

		CO <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	PFC/HFC ton/yr <sup>2</sup>									Total GHG Mass Basis ton/yr <sup>4</sup>	Total CO <sub>2</sub> e ton/yr <sup>5</sup>
Unit No.	GWP <sup>1</sup>	1	298	25	23,900	footnote 3										
HOBB-1 + DB-1	mass GHG	945,051	1.75	17.5											945,070	
	CO <sub>2</sub> e	945,051	522	438												946,011
HOBB-2 + DB-2	mass GHG	945,051	1.75	17.5											945,070	
	CO <sub>2</sub> e	945,051	522	438												946,011
FP-1	mass GHG	25.28	2.05E-04	1.03E-03											25.28	
	CO <sub>2</sub> e	25.28	6.1E-02	2.6E-02												25.37
G-1	mass GHG	216.20	1.75E-03	8.77E-03											216.21	
	CO <sub>2</sub> e	216.20	5.2E-01	2.2E-01												216.94
FH-1, FH-2, FH-3	mass GHG	3,686.18	6.95E-03	6.95E-02											3,686.25	
	CO <sub>2</sub> e	3,686.18	2.1E+00	1.7E+00												3,689.99
	mass GHG															
	CO <sub>2</sub> e															
	mass GHG															
	CO <sub>2</sub> e															
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	mass GHG															
	CO <sub>2</sub> e															
	mass GHG															
	CO <sub>2</sub> e															

<sup>1</sup> GWP (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

<sup>2</sup> For HFCs or PFCs describe the specific HFC or PFC compound and use a separate column for each individual compound.

<sup>3</sup> For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

<sup>4</sup> Green house gas emissions on a mass basis is the ton per year green house gas emission before adjustment with its GWP.

<sup>5</sup> CO<sub>2</sub>e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.



## Section 3

# Application Summary

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The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will effect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

**Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM):** Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.nmenv.state.nm.us/aqb/permit/app\\_form.html](http://www.nmenv.state.nm.us/aqb/permit/app_form.html)) for more detailed instructions on SSM emissions.

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This application proposes a significant revision to NSR Permit PSD 3449-M2 for Lea Power Partners, LLC (LPP) Hobbs Generating Station (Hobbs). Hobbs is a natural gas fueled, nominal 600 MW net output power plant with two advanced firing temperature, Mitsubishi 501F combustion turbine generators (CTGs), each provided with its own heat recovery steam generator (HRSG) including duct burners, a single condensing, reheat steam turbine generator (STG), and an air cooled condenser serving the STG. The plant generates electricity for sale to Southwestern Public Service Company, its successors or assigns. The facility is located approximately 9 miles west of Hobbs, New Mexico in Lea County.

This permit revision is intended to resolve discrepancies between the hourly emission rate representations of some of the auxiliary equipment currently in operation at Hobbs and the rates actually listed in the PSD permit. The initial Title V permit application (Permit P244), as submitted on June 8, 2009, included vendor representations that were never incorporated into the facility Title V or PSD permits. These representations were for auxiliary equipment, including the firewater pump diesel engine (FP-1), the standby generator diesel engine (G-1), the auxiliary cooling water towers (AC-1, AC-2 and AC-3) and the inlet chillers (IC-1, IC-2 and IC-3).

No physical changes or changes in the method of operation have been made to any of these units since their initial installation at Hobbs. However, during the 2015 Title V renewal process, it was discovered that the currently authorized emission rates do not align with vendor information supplied in the original June 2009 Title V permit application. Additionally, it was discovered that the represented flow rates for the cooling towers and the inlet chillers require modifications to reflect as-built conditions. Therefore, through this permitting action, LPP is requesting that the permitted emission rates for these units be updated to reflect those achievable based on the vendor guarantees. In addition to these changes, LPP is also requesting authorization of a new 500 gallon gasoline tank, a 500 gallon diesel tank, and a 100 gallon diesel tank, which are insignificant sources of VOC.

The necessary adjustments to these emission rates reflect increases in NO<sub>x</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub> from FP-1 and G-1, and increases in TSP, PM<sub>10</sub> and PM<sub>2.5</sub> from AC-1, AC-2, AC-3, IC-1, IC-2, and IC-3. There are no required increases in SO<sub>2</sub> emission rates.

A suggested permit markup is included in the following pages, starting with Section 3, Page 2. Within the markup, the text requested to be modified has been changed to red strikethrough font. In green font is the suggested new text.

## TABLE OF CONTENTS

Part A	FACILITY SPECIFIC REQUIREMENTS .....	3
A100	Introduction.....	3
A101	Permit Duration (expiration).....	4
A102	Facility: Description.....	4
A103	Facility: Applicable Regulations.....	5
A104	Facility: Regulated Sources .....	6
A105	Facility: Control Equipment .....	8
A106	Facility: Allowable Emissions .....	9
A107	Facility: Allowable Startup, Shutdown, & Maintenance (SSM) .....	11
A108	Facility: Allowable Operations .....	12
A109	Facility: Reporting Schedules .....	13
A110	Facility: Fuel and Fuel Sulfur Requirements .....	13
A111	Facility: 20.2.61 NMAC Opacity.....	14
	EQUIPMENT SPECIFIC REQUIREMENTS .....	14
A200	Oil and Gas Industry – Not Required .....	14
A300	Construction Industry – Not Required.....	14
	Power Generation Industry .....	14
A400	Power Generation Industry .....	14
A401	Turbines .....	15
A402	Engines.....	20
Part B	GENERAL CONDITIONS .....	21
B100	Introduction.....	21
B101	Legal .....	21
B102	Authority .....	22
B103	Annual Fee .....	22
B104	Appeal Procedures .....	23
B105	Submittal of Reports and Certifications.....	23
B106	NSPS and/or MACT Startup, Shutdown, and Malfunction Operations .....	24
B107	Startup, Shutdown, and Maintenance Operations.....	24
B108	General Monitoring Requirements .....	24
B109	General Recordkeeping Requirements .....	26
B110	General Reporting Requirements.....	27
B111	General Testing Requirements.....	28
B112	Compliance .....	31
B113	Permit Cancellation and Revocation.....	31
B114	Notification to Subsequent Owners .....	32
B115	Asbestos Demolition.....	32
B116	Short Term Engine Replacement .....	32
Part C	MISCELLANEOUS .....	35
C100	Supporting On-Line Documents .....	35
C101	Definitions.....	36
C102	Acronyms.....	38

**PART A      FACILITY SPECIFIC REQUIREMENTS****A100   Introduction**

- A. This permit PSD 3449-M2 supersedes all portions of Air Quality Permit PSD 3449-M1, issued September 23, 2011, except the portion requiring compliance tests. Compliance test conditions from previous permits, if not completed, are still in effect, in addition to compliance test requirements contained in this permit.
- B. The permit limits and conditions, identified below, are based on a Prevention of Significant Deterioration (PSD) BACT determination, and any change or revision of these emission limits or control methods must be applied for and accompanied by a corresponding re-evaluation of the original BACT determination in accordance with 20.2.74 NMAC.
- (1) For the turbines with duct burners, NO<sub>x</sub> emission limit of 2.0 ppmvd @ 15 percent O<sub>2</sub> averaged over 24 hours represents BACT.
  - (2) For the turbines with duct burners, 2 ppmvd CO @ 15 percent O<sub>2</sub> averaged over 1-hour and 1 ppmvd VOC @ 15 percent O<sub>2</sub> based on hourly rolling 24-hour average represents BACT.
  - (3) For the turbines with duct burners, BACT for SO<sub>2</sub> is the use of pipeline quality natural gas limited to a total sulfur content of 1.7 grains/100 dry standard cubic feet (dscf). For this permit, pipeline quality natural gas is defined as natural gas with a total sulfur content of 1.7 grains/100 dscf or less.
  - (4) For the turbines with duct burners, pipeline quality natural gas will be the only fuel used and is accepted as BACT for PM<sub>10</sub>.
  - (5) For the emergency generator and fire water pump, BACT is the utilization of engine design and good combustion practices through the use of turbocharging and aftercoolers.
  - (6) For the emergency generator and fire water pump, good combustion practices are BACT for CO and VOC emissions.
  - (7) For the emergency generator and fire water pump, BACT for SO<sub>2</sub> is the use of low sulfur diesel fuel.
  - (8) For the emergency generator, BACT for PM<sub>10</sub> was injection timing retardation, and lean burn combustion, utilization of engine design and good combustion practices through the use of turbocharging and aftercoolers.
  - (9) For the fire water pump, BACT for PM<sub>10</sub> was injection timing retardation, and lean burn combustion, utilization of engine design and good combustion practices through the use of turbocharging and aftercoolers.

- (10) For the Fuel Gas Heaters, BACT for NO<sub>x</sub> is the emission rate of 0.054 lb/mmBTU, which was the lowest emission rate from the RBLC database at the time.
- (11) For the Fuel Gas Heaters, BACT is the use of pipeline quality natural gas and utilizing good combustion control practices with a CO limit of 0.03 lb/mmBTU, and a VOC limit of 0.005 lb/mmBTU.
- (12) For the Fuel Gas Heaters, BACT will be minimizing SO<sub>2</sub> emissions by using pipeline quality natural gas and utilizing good combustion control practices, while meeting the SO<sub>2</sub> emission limit of 0.006 lb/mmBTU based on the AP-42 emission factor (based on natural gas with 1.7 grains/100 standard cubic feet, Section A110.A) and the SO<sub>2</sub> lb/hr emission limit in Table 106.B.
- (13) For the Fuel Gas Heaters, BACT will consist of minimizing PM/PM<sub>10</sub> emissions by using pipeline quality natural gas and utilizing good combustion control practices while meeting the PM/PM<sub>10</sub> emission limit of 0.007 lb/MMBtu, which was the lowest emission rate from the RBLC at the time.
- (14) For the Cooling Towers, BACT for PM<sub>10</sub> will be the use of a state of the art, high efficiency drift eliminator that will limit total drift to 0.001 percent of the circulated water flow.

**A101 Permit Duration (expiration)**

- A. The term of this permit is permanent unless withdrawn or cancelled by the Department.

**A102 Facility: Description**

- A. This facility is a natural gas fueled, nominal 600 MW net output power plant with two advanced firing temperature, Mitsubishi 501F combustion turbine generators (CTGs), each provided with its own heat recovery steam generator (HRSG) including duct burners, a single condensing, reheat steam turbine generator (STG), and an air cooled condenser serving the STG. The plant generates electricity for sale to Southwestern Public Service Company, its successors or assigns.
- B. This facility is located approximately 9 miles west of Hobbs, New Mexico in Lea County.
- C. This modification consists of modifying both combustion gas turbines resulting in an increase in power output, fuel input and pound per hour emission rates for VOCs. The existing ppmv BACT limits for these units are not increasing. The permittee took a limit on annual operating hours to reduce ton per year emission rates to net out of and avoid PSD review of all pollutants. Existing ton per year emissions during routine and predictable startup, shutdown, or scheduled maintenance (SSM) are

increasing due to a clarification of emissions that occur during startup and during normal operation and a removal of a permit limit on the total number of startups allowed. However, the total ton per year emission limits for both steady state and SSM, combined are not PSD significant. SSM limits for NO<sub>x</sub>, CO and VOCs that were omitted from previous permits are added in this permit action. PM<sub>2.5</sub> mass emission limits are established since an ambient impact analysis for this pollutant was completed for the first time. This description of this modification is for informational purposes only and is not enforceable.

- D. [Table 102.A](#) and [Table 102.B](#) show the total potential emissions from this facility for information only, not an enforceable condition, excluding exempt sources or activities.

**Table 102.A: Total Potential Pollutant Emissions from Entire Facility\***

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NO <sub>x</sub> )	184.7 <del>184.5</del>
Carbon Monoxide (CO)	280.9
Volatile Organic Compounds (VOC)	96.7
Sulfur Dioxide (SO <sub>2</sub> )	48.5
Total Suspended Particulates (TSP)	88.6 <del>87.3</del>
Particulate Matter less than 10 microns (PM <sub>10</sub> )	87.3 <del>86.7</del>
Particulate Matter less than 2.5 microns (PM <sub>2.5</sub> )	86.1 <del>85.8</del>
Greenhouse Gas (as CO <sub>2</sub> e)	1,897,124

\*Totals include emissions from SSM

**Table 102.B: Total Potential \*HAPS that exceed 1.0 ton per year**

Pollutant	Emissions (tons per year)
Formaldehyde	1.1
Ammonia (TAP)	281.3
Total HAPs**	3.4 <del>3.2</del>

\* HAP emissions are already included in the VOC emission total.

\*\* The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 tons per year are listed here.

### **A103 Facility: Applicable Regulations**

- A. The permittee shall comply with all applicable sections of the requirements listed in [Table 103.A](#).

**[Table 103.A: Applicable Requirements](#)**

Applicable Requirements	Federally Enforceable	Unit No.
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NSR Permit No: PSD 3449-M2

Page 6 of 39

Applicable Requirements	Federally Enforceable	Unit No.
20.2.1 NMAC General Provisions	X	Entire Facility
20.2.3 NMAC Ambient Air Quality Standards	X	Entire Facility
20.2.7 NMAC Excess Emissions	X	Entire Facility
20.2.33 NMAC Gas Burning Equipment – Nitrogen Dioxide	X	DB-1, DB-2
20.2.61 NMAC Smoke and Visible Emissions	X	HOBB-1, HOBB-2, DB-1, DB-2, FH-1, FH-2, FH-3, G-1 and FP-1
20.2.70 NMAC Operating Permits	X	Entire Facility
20.2.71 NMAC Operating Permit Emission Fees	X	Entire Facility
20.2.72 NMAC Construction Permit	X	Entire Facility
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	Entire Facility
20.2.74 NMAC Prevention of Significant Deterioration	X	Entire Facility
20.2.75 NMAC Construction Permit Fees	X	Entire Facility
20.2.77 NMAC New Source Performance	X	HOBB-1, HOBB-2, DB-1, DB-2
20.2.84 NMAC Acid Rain Permit	X	HOBB-1, HOBB-2, DB-1, DB-2
40 CFR 50 National Ambient Air Quality Standards	X	Entire Facility
40 CFR 60, Subpart A, General Provisions	X	HOBB-1, HOBB-2, DB-1, DB-2, G-1
40 CFR 60, Subpart IIII, Stationary Compression Ignition Internal Combustion Engines	X	G-1
40 CFR 60, Subpart KKKK, Stationary Combustion Turbines	X	HOBB-1, HOBB-2, DB-1, DB-2
40 CFR 63, Subpart A, General Provisions	X	G-1, FP-1
40 CFR 63, <del>Subpart A, and</del> ZZZZ, Stationary Reciprocating Internal Combustion Engines (RICE MACT)	X	G-1, FP-1
40 CFR 63, Subpart CCCCCC, Gasoline Dispensing Facilities	X	T-9
40 CFR 72 Title IV Acid Rain	X	HOBB-1, HOBB-2, DB-1, DB-2
40 CFR 73 Title IV Acid Rain Sulfur Dioxide Allowance Emissions	X	HOBB-1, HOBB-2, DB-1, DB-2
40 CFR 75 Title IV Acid Rain Continuous Emission Monitoring	X	HOBB-1, HOBB-2, DB-1, DB-2

**A104 Facility: Regulated Sources**

- A. Table 104 lists the emission units authorized for this facility. Emission units identified as exempt activities (as defined in 20.2.72.202 NMAC) and/or equipment not regulated pursuant to the Act are not included.



NSR Permit No: PSD 3449-M2

Page 7 of 39

**Table 104: Regulated Sources List**

<b>Unit No.</b>	<b>Source Description</b>	<b>Make Model</b>	<b>Serial No.</b>	<b>Capacity</b>	<b>Manufacture Date</b>
HOBB-1	Combustion Turbine (CT)	Mitsubishi Heavy Industries M501F-F4	T487	180 MW (1,697 MMBtu/hr (LHV) nominal)	2001, Modified March 2014
HOBB-2	Combustion Turbine (CT)	Mitsubishi Heavy Industries M501F-F4	T488	180 MW (1,697 MMBtu/hr (LHV) nominal)	2001, Modified March 2014
DB-1	Forney Duct Burner	Forney	913864	330 MM Btu/hr	2007
DB-2	Forney Duct Burner	Forney	913865	330 MM Btu/hr	2007
AC-1	Auxiliary Cooling Tower	Baltimore Air Cooler, FXV3-364-100	U014653101	9,500 gpm	2002
AC-2	Auxiliary Cooling Tower	Baltimore Air Cooler, FXV3-364-100	U014653102	9,500 gpm	2002
AC-3	Auxiliary Cooling Tower	Baltimore Air Cooler, FXV3-364-100	U014653103	9,500 gpm	2002
IC-1	Inlet Chiller	Baltimore Aircoil, 331132A	U014283404	5,898 gpm	2002
IC-2	Inlet Chiller	Baltimore Aircoil, 331132A	U014283405	5,898 gpm	2002
IC-3	Inlet Chiller	Baltimore Aircoil, 331132A	U014283406	5,898 gpm	2002
FH-1	Fuel Gas Heater	Rheos, 2400	A07193433	2.4 MMBtu/hr	2008
FH-2	Fuel Gas Heater	Rheos, 2400	A07193435	2.4 MMBtu/hr	2008
FH-3	Fuel Gas Heater	Rheos, 2400	A07193434	2.4 MMBtu/hr	2008
G-1	Standby Generator	Volvo Penta, D1641GEP	D16*021102 *C3*A	565kW	2008
FP-1	Diesel Fire Pump	Detroit Diesel, PDFFP06 FA-IIV	6VF-300006	443 Hp	2001

Unit No.	Source Description	Make Model	Serial No.	Capacity	Manufacture Date
SCR-1	Selective Catalytic Reduction	Peerless Manufacturing Co.	70418A	< 2.0 ppmvd @ 15% O <sub>2</sub> average over 24 hours	2008
SCR-2	Selective Catalytic Reduction	Peerless Manufacturing Co.	70418B	< 2.0 ppmvd @ 15% O <sub>2</sub> average over 24 hours	2008

1. All like-kind engine replacements must be evaluated for applicability to NSPS and NESHAP requirements.

- B. Stack Height of each CT/DB: To demonstrate compliance with 20.2.72.502 NMAC Table A–Non-carcinogens for ammonia, and in conjunction with Table-C Stack Height Correction Factor, the height of each CT/DB stack shall be no less than 165 feet above ground.
- C. All equipment, including emission monitoring equipment and the cooling tower, shall be installed, operated and maintained in a manner consistent with the manufacturer's intended purpose, specifications and recommended procedures.

#### **A105 Facility: Control Equipment**

- A. [Table 105](#) lists all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

**Table 105: Control Equipment List:**

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit No. <sup>1</sup>
SCR-1	Selective Catalytic Reduction	NO <sub>x</sub>	HOBB-1/DB-1
SCR-2	Selective Catalytic Reduction	NO <sub>x</sub>	HOBB-2/DB-2
CAT-1	Catalytic Oxidation	CO, VOC, HAP	HOBB-1/DB-1
CAT-2	Catalytic Oxidation	CO, VOC, HAP	HOBB-2/DB-2
N/A	High Efficiency Drift Eliminator	PM <sub>10</sub>	IC-1
N/A	High Efficiency Drift Eliminator	PM <sub>10</sub>	IC-2
N/A	High Efficiency Drift Eliminator	PM <sub>10</sub>	IC-3
N/A	Dry Low NO <sub>x</sub> Burner	NO <sub>x</sub>	FH-1
N/A	Dry Low NO <sub>x</sub> Burner	NO <sub>x</sub>	FH-2
N/A	Dry Low NO <sub>x</sub> Burner	NO <sub>x</sub>	FH-3
N/A	Dry Low NO <sub>x</sub> Burner	NO <sub>x</sub>	HOBB-1/DB-1
N/A	Dry Low NO <sub>x</sub> Burner	NO <sub>x</sub>	HOBB-2/DB-2

1. Control for unit number refers to a unit number from the Regulated Equipment List

**A106 Facility: Allowable Emissions**

- A. The following Section lists the emission units and their allowable emission limits.  
(40 CFR 50, 40 CFR 60, Subparts A and KKKK, 20.2.72.210.A and B.1 NMAC)

**Table 106.A: Allowable Emissions for Turbine Generators (Units HOBB-1/DB-1 & HOBB-2/DB-2)**

Pollutant	CT w/Duct Burner	CT w/o Duct Burner	CTG <sup>9</sup> Startup & Shutdown	Averaging Period
NO <sub>2</sub> <sup>2</sup> (lbs/hr), each	18.1	14.5	193.2	Hourly rolling 24-hour average based on CEMS data (SSM limits are based on a 1-hour average)
NO <sub>2</sub> <sup>2,3</sup> (ppmv) dry @ 15% O <sub>2</sub> , each	2.0 BACT		96 <sup>1</sup> BACT	Hourly rolling 24-hour average based on CEMS data
NO <sub>2</sub> <sup>2,4</sup> (lb/MWh), each	0.43		Per NSPS KKKK	Daily rolling 30-day average (NSPS KKKK)
NO <sub>2</sub> <sup>2</sup> (tons/yr), combined	181.0			Daily rolling 365-day total (includes SSM emissions)
CO (lbs/hr), each	11.0	8.8	441	1-hour block average (Normal operation and SSM)
CO <sup>5</sup> (ppmv) dry @ 15% O <sub>2</sub> , each	2.0 BACT		3000 <sup>1</sup> BACT	1-hour block average (Normal operation and SSM)
CO (tons/yr), combined	279.5			Daily rolling 365-day total (includes SSM emissions)
VOC (lbs/hr), each	2.8	2.4	77.8	Hourly rolling 24-hour average, calculation based on emission factor determined from compliance test data (SSM limits are based on a 1-hour average)
VOC <sup>6</sup> (ppmv) dry @ 15% O <sub>2</sub> , each	1.0 BACT		187 <sup>1</sup> BACT	Hourly rolling 24-hour average (SSM limits are based on a 1-hour average)
VOC (tons/yr), combined	96.4			Daily rolling 365-day total (includes SSM emissions)

Pollutant	CT w/Duct Burner	CT w/o Duct Burner	CTG9 Startup & Shutdown	Averaging Period
SO <sub>2</sub> (lbs/hr), each	10.7	8.4	N/A	1-hour block average, calculation based on Sulfur content of fuel
SO <sub>2</sub> <sup>7</sup> (lb/MMBtu), each	0.06		Per NSPS KKKK	Daily rolling 30-day average (NSPS KKKK)
SO <sub>2</sub> (tons/yr), combined	48.2			Daily rolling 365-day total (includes SSM emissions)
TSP/PM <sub>10</sub> /PM <sub>2.5</sub> <sup>8</sup> (lbs/hr), each	17.1	11.3	N/A	Hourly rolling 24-hour average, calculation based on emission factor determined from compliance test data
TSP/PM <sub>10</sub> (lb/MMBtu), each <sup>10</sup>	0.0089	0.0071	N/A	Hourly rolling 24-hour average
TSP/PM <sub>10</sub> /PM <sub>2.5</sub> (tons/yr), combined	85.8			Daily rolling 365-day total (includes SSM emissions)
NH <sub>3</sub> (lbs/hr) each	32.1		N/A	Calculation based on compliance test data
NH <sub>3</sub> (tons/yr), combined	281.3		N/A	Daily rolling 365-day total

<sup>1</sup> CTG Startup not-to-exceed emissions are based on manufacturer's data + a 20% safety factor as a 1-hr average.

Compliance with these limits shall be demonstrated by the monitoring required in Condition A401.C.

<sup>2</sup> Nitrogen oxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>.

<sup>3</sup> The NO<sub>2</sub> limit of 2.0 ppmvd is based on the SCR BACT determination submitted with the application no. 3449.

<sup>4</sup> This NO<sub>2</sub> limit is in accordance with Table 1 to NSPS Subpart KKKK.

<sup>5</sup> The CO limit of 2.0 ppmvd is based on the CatOx BACT determination submitted with the application no. 3449.

<sup>6</sup> The VOC limit of 1.0 ppmvd is based on the CatOx BACT determination submitted with the application no. 3449.

<sup>7</sup> The SO<sub>2</sub> limit is in accordance with 40 CFR 60.4330.

<sup>8</sup> The TSP/PM<sub>10</sub>/PM<sub>2.5</sub> limits include condensable particulate matter.

<sup>9</sup> N/A" indicates that startup and shutdown emissions are less than or included in the emissions limits established for normal operation.

<sup>10</sup> PSD3449R6 reduced lb/MMBtu from 0.015 combined to 0.0089 and 0.0071.

**Table 106.B: Allowable Emissions – Auxiliary Equipment**

Unit No.	<sup>1</sup> NO <sub>x</sub> pph	NO <sub>x</sub> tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO <sub>2</sub> pph	SO <sub>2</sub> tpy	TSP pph	TSP tpy	PM <sub>10</sub> pph	PM <sub>10</sub> tpy
<sup>4</sup> IC-1, IC-2, IC-3 <del>A&amp;B</del>	- <sup>2</sup>	-	-	-	-	-	-	-	<	2.1 <del>1.1</del>	<	1.1 <del>0.5</del>
FH-1, FH-2 FH-3 <del>A&amp;B4</del>	0.4	1.7	0.2	1.0	0.04	0.2	0.04	0.2	0.1	0.2	0.1	0.2
FP-1 <del>A&amp;B</del>	7.4 <del>3.5</del>	<	1.4	<	0.3 <del>0.8</del>	<	0.7	<	0.2 <del>0.1</del>	<	0.2 <del>0.1</del>	<
G-1 <del>A&amp;B</del>	6.5 <del>6.3</del>	1.6	0.9	0.2	0.2 <del>0.5</del>	0.1	0.3	0.1	0.1 <del>0.2</del>	0.1	0.1 <del>0.2</del>	0.1
AC-1, AC-2, AC-3 <del>A&amp;B</del> <sup>4</sup>	-	-	-	-	-	-	-	-	0.08 <del>0.02</del>	0.35 <del>0.1</del>	0.04 <del>0.02</del>	0.2 <del>0.1</del>

NSR Permit No: PSD 3449-M2

Page 11 of 39

<sup>1</sup> Nitrogen Oxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>.

<sup>2</sup> “-“ indicates that in accordance with the application, emissions of this pollutant are not expected.

<sup>3</sup> “<“ indicates the application represented emissions less than 1.0 pph or 1.0 tpy for this pollutant. Allowable limits are not imposed on this level of emissions, except for flares and pollutants with controls or other regulatory restrictions.

<sup>4</sup> Emission limits are the combined totals for these emission units. Units AC-3A&B, FH-3A&B, IC-3A&B added by NSR 3449-R2.

- B. BACT Operating Limits for Units HOBB-1/DB-1 and HOBB-2/DB-2, SO<sub>2</sub> and TSP/PM<sub>10</sub> shall be limited by limiting fuel usage to only pipeline quality natural gas with a total sulfur content of 1.7 grains/100 dscf or less.

#### **A107 Facility: Allowable Startup, Shutdown, & Maintenance (SSM)**

- A. The permittee shall monitor, record and report all instances and amounts of excess emissions during routine or predictable startup, shutdown and maintenance, in accordance with 20.2.7 NMAC Excess Emissions. NO<sub>x</sub> excess emissions shall be determined in accordance with 40 CFR 60.4350.
- B. The authorization of emission limits for routine or predictable startup, shutdown, and maintenance (SSM) in Table 106.A does not supersede the requirements to minimize emissions according to General Conditions B101.F and B107.A.
- C. Routine and Predictable SSM lb/hr and BACT Emission Limits – HOBB-1/DB-1 and HOBB-2/DB-2

**Requirement:** To demonstrate compliance with the NO<sub>x</sub>, CO, and VOC lb/hr SSM emission limits and the ppmvd BACT SSM limits in Table 106.A, the permittee shall meet the facility's Operational Plan to Mitigate SSM Emissions (Plan) required by 20.2.7.14.A NMAC. The Plan shall at a minimum:

- ensure that, at all times, the plant operators maintain the combustion turbines, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions and;
- contain a detailed operational plan for minimizing emissions during periods of routine and predictable Startups and Shutdowns associated with planned maintenance or normal operations.

**Monitoring:** The permittee shall monitor operation of Units HOBB-1/DB-1 and HOBB-2/DB-2 in accordance with the facility Operational Plan to Mitigate SSM Emissions.

**Recordkeeping:** The permittee shall keep records of the current Operational Plan to Mitigate SSM Emissions (Plan) and its revisions.

Records of the actions required to mitigate SSM emissions in accordance with the Plan and records documenting that Plan requirements are met shall be kept.

NSR Permit No: PSD 3449-M2

Page 12 of 39

To ensure on-going compliance with the SSM BACT limits, the permittee shall update the Plan based on operational experience with the facility.

**Reporting:** The permittee shall report in accordance with [Section B110](#).

D. SSM Ton Per Year Operating Requirements for HOBBS-1/DB-1 and HOBBS-2/DB-2

**Requirement:** The permittee shall limit annual, ton per year emissions, including emissions during routine or predictable startup, shutdown, and maintenance (SSM) to the ton per year limits listed in Table A106.A.

**Monitoring:** The permittee shall monitor all routine or predictable startups and shutdowns and scheduled maintenance events as required in Condition A401.F.

**Recordkeeping:** The permittee shall meet the recordkeeping requirements in Condition A401.C.

**Reporting:** The permittee shall report in accordance with [Section B110](#).

- (1) The following definitions expand upon the existing definitions of 20.2.7.7 NMAC:
- (a) Startup: a startup is initiated when the Data Acquisition and Handling System (DAHS) detects a flame signal (or equivalent signal) and ends when the permissives for the emission control system are met (i.e., steady state emissions compliance is achieved).
  - (b) Shutdown: a shutdown begins when the load drops to the point at which steady state emissions compliance can no longer be assured and ends when a flame-off signal is detected.
  - (c) Normal Operation: Normal operation begins upon completion of startup and lasts until a shutdown begins. Normal operations include operation of the combustion turbines (HOBB-1 and HOBB-2) in simple cycle or combined cycle mode with and without associated duct burner (DB-1 and DB-2) firing.
  - (d) Downtime or unit off-line is that time between the end of shutdown and the beginning of startup.

**A108 Facility: Allowable Operations**

- A. Except for the unit specific limitations in Condition A108.B below, this facility is authorized for continuous operation. No monitoring, recordkeeping, or reporting is required to demonstrate compliance with continuous hours of operation.

B. Hours of Operation For Units HOBB-1/DB-1 and HOBB-2/DB-2

**Requirement:** In order to maintain PSD minor modification status of the turbine generator modification, for all NSR regulated pollutants, in permit PSD3449-M2, the permittee shall limit operating hours of each gas turbine to no more than 8400 hours per year. Operating

NSR Permit No: PSD 3449-M2

Page 13 of 39

hours include all hours of operation including periods of startup and shutdown.
<b>Monitoring:</b> The permittee shall monitor operating hours of each unit in accordance with Condition A401.F.
<b>Recordkeeping:</b> The permittee shall meet the recordkeeping requirements in Condition A401.F.
<b>Reporting:</b> The permittee shall report in accordance with Section B110.

### C. Hours of Operation For Units G-1 and FP-1

<b>Requirement:</b>
(1) In accordance with 20.2.72.202.B.3 NMAC, the Standby Generator (G-1) shall only be operated during the unavoidable loss of commercial power or for necessary maintenance activities, and shall be operated less than 500 hours per year, based on a monthly rolling 12-month total basis. Any maintenance activities conducted on the standby generator are included in the 500 hours per year total.
(2) The diesel fire water pump (FP-1) shall not operate more than 100 hours per year.
<b>Monitoring:</b> None
<b>Recordkeeping:</b> The permittee shall keep record in accordance with Section B109.
<b>Reporting:</b> The permittee shall report in accordance with Section B110.

### A109 Facility: Reporting Schedules

- A. The permittee shall report according to the Specific Conditions and General Conditions of this permit.

### A110 Facility: Fuel and Fuel Sulfur Requirements

- A. Fuel and Fuel Sulfur Requirements For Units HOBB-1/DB-1 HOBB-2/DB-2, FH-1, FH-2, and FH-3

<b>Requirement:</b> All combustion emission units shall combust only natural gas containing no more than 1.7 grains of total sulfur per 100 dry standard cubic feet.
<b>Monitoring:</b> None. In accordance with EPA document EMTIG – GD-009 (March 12, 1990), no daily monitoring of fuel bound nitrogen is required for Units HOBB-1 and HOBB-2 because they combust only pipeline quality natural gas.
<b>Recordkeeping:</b> The permittee shall demonstrate compliance with the natural gas limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the fuel, or fuel gas analysis, specifying the total sulfur content in accordance with 40 CFR 60.4365. If fuel gas analysis is used, the analysis shall not be older than one year.  Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier, with each fuel delivery, which shall include the delivery date, the fuel

type delivered, the amount of fuel delivered, and the maximum sulfur content of the fuel.
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<b>Reporting:</b> The permittee shall report in accordance with Section B110.
---

**A111 Facility: 20.2.61 NMAC Opacity**

A. For Units HOBB-1/DB-1 HOBB-2/DB-2, FH-1, FH-2, and FH-3

<b>Requirement:</b> Visible emissions from combustion emissions stacks for units HOBB-1/DB-1 HOBB-2/DB-2, FH-1, FH-2, and FH-3, shall not equal or exceed an opacity of 20%.
--

<b>Monitoring:</b> Use of natural gas fuel constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC.
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<b>Recordkeeping:</b> The permittee shall record dates of any opacity measures and the corresponding opacity readings.
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<b>Reporting:</b> The permittee shall report in accordance with Section B110.
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B. For Units G-1 and FP-1

<b>Requirement:</b> Visible emissions from combustion emission stacks from units G-1 and FP-1 shall not equal or exceed an opacity of 20%.
--

<b>Monitoring:</b> Once every calendar year, an opacity measurement shall be performed on each Unit for a minimum of 10 minutes in accordance with the procedures of 40 CFR 60, Appendix A, Method 9.
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<b>Recordkeeping:</b> The permittee shall record the opacity measures with the corresponding opacity readings.
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<b>Reporting:</b> The permittee shall report in accordance with Section B110.
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**EQUIPMENT SPECIFIC REQUIREMENTS****A200 Oil and Gas Industry – Not Required****A300 Construction Industry – Not Required****POWER GENERATION INDUSTRY****A400 Power Generation Industry**

A. This section has common equipment related to most Electric Service Operations (SIC-4911).



**A401 Turbines**

A. Initial Compliance Test for TSP/PM<sub>10</sub>/PM<sub>2.5</sub> (Units HOBB-1/DB-1 and HOBB-2/DB-2)

**Requirement:** The permittee shall comply with the allowable lbs/MMBtu and lbs/hr emissions limit for each operating scenario (CT w/duct burner and CT w/o duct burner) listed in Table 106.A.

Compliance with the TSP emissions limits shall be deemed to demonstrate compliance with the PM<sub>10</sub> and PM<sub>2.5</sub> limits.

**Monitoring:** The permittee shall test using EPA Reference Methods 5 for filterable PM and 202 for condensable PM as required in Condition B111. The Method 5 and 202 test results shall be combined to determine compliance with allowable emission limits.

These tests shall occur within the time specified in Condition B111.A(2).

**Recordkeeping:** The permittee shall record the following for each test run:

- pound per hour emission rate from Method 5, from Method 202, and the sum of the two rates
- the fuel flow rate (scf/hr), fuel heat rate (MMBtu/scf), and the calculated heat capacity of each unit (scf/hr x MMBtu/scf = MMBtu/hr)

The permittee shall also meet the recordkeeping requirements in Section B111.

**Reporting:** The permittee shall report in accordance with Section B110 and B111.

B. 40 CFR 60, Subpart KKKK (Units HOBB-1/DB-1 and HOBB-2/DB-2)

**Requirements:** HOBB-1 and HOBB-2 shall comply with the standards for nitrogen oxide and sulfur dioxide of 40 CFR Part 60, Subpart KKKK.

**Monitoring:** The permittee shall comply with the applicable monitoring and testing requirements of 40 CFR 60.4345.

The permittee shall comply with the combustion turbine monitoring requirements of 40 CFR 60 Subparts A and KKKK. The permittee may use the Department's Custom Fuel Monitoring Schedule in Attachment A to meet the requirements of 40 CFR 60.4370.

In accordance with EPA document EMTIG – GD-009 (March 12, 1990), no daily monitoring of fuel bound nitrogen is required for Units HOBB-1 and HOBB-2 because they combust only pipeline quality natural gas.

**Recordkeeping:** The permittee shall comply with the applicable recordkeeping requirements of 40 CFR 60.7.

**Reporting:** The permittee shall comply with the applicable reporting requirements of 40 CFR 60.4375 and 60.4395.

NSR Permit No. PSD 3449-M2  
16 of 39

Page

C. Continuous Emission Monitoring (CEMS) For Units HOBB-1/DB-1 and HOBB-2/DB-2

**Requirement:** To demonstrate compliance with the allowable NO<sub>x</sub>, CO, VOC, SO<sub>x</sub> and TSP/PM<sub>10</sub>/PM<sub>2.5</sub> emission limits in Table 106.A and with NSPS KKKK limits, the permittee shall meet the following Continuous Emissions Monitoring System (CEMS) requirements and the following monitoring, recordkeeping, and reporting requirements.

1. The exhaust stacks for these units shall be equipped and maintained with NO<sub>x</sub>, CO and O<sub>2</sub> CEMS. The permittee shall maintain the units according to manufacturer's requirements.
2. The NO<sub>x</sub> and O<sub>2</sub> CEMS shall be designed, installed and certified in accordance with 40 CFR Part 75. Alternatively, the NO<sub>x</sub> CEMS may be installed and certified in accordance with the provisions of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2) – Specifications and Test Procedures for SO<sub>2</sub> and NO<sub>x</sub> Continuous Emissions Monitoring Systems in Stationary Sources.
3. The CO CEMS shall be designed, installed and certified in accordance with the provisions of 40 CFR Part 60, Appendix B, Performance Specification 4A – Specification and Test Procedure for Carbon Monoxide Continuous Emissions Monitoring Systems in Stationary Sources. Following certification testing, the CO CEMS shall be operated in accordance with the provisions of 40 CFR Part 60, Appendix F – Quality Assurance Requirements for Continuous Emissions Monitoring Systems.

**Monitoring:**

1. All CEMS shall comply with the requirements of 40 CFR 60.13, Monitoring Requirements.
2. The NO<sub>x</sub> CEMS shall also comply with the requirements of 40 CFR 60.4345.
3. The CEMS shall monitor all instances of excess emissions during startups, shutdowns, maintenance and malfunctions, including those associated with control equipment upset.

**Recordkeeping:**

- (1) The permittee shall keep a quality assurance plan for all CEMS in accordance with 40 CFR 60.4345 and 40 CFR 75, Appendix B.
- (2) The permittee shall monitor and record all instances in which the CEMS are not in operation or accurately recording stack concentrations.
- (3) The permittee shall ensure that all of the required monitoring systems are installed and meet the following requirements:
  - i) The NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub> CEMS shall be audited in accordance with 40 CFR Part 60 Subpart KKKK or 40 CFR Part 75. The CO CEMS shall be audited in accordance with 40 CFR Part 60, Appendix F.
  - ii) The reported output of the CEMS shall be in:
    - a. ppmv of NO<sub>x</sub> and CO at dry standard conditions;
    - b. ppmv of NO<sub>x</sub> and CO corrected to 15% oxygen at dry standard conditions; and lbs/hr of NO<sub>x</sub> and CO.
  - iii) The QA/QC plan required by 40 CFR Part 60, Appendix F, shall include a data

substitution procedure for the CO CEMS that is consistent with requirements of 40 CFR Part 75's missing data procedure for SO<sub>2</sub> data. The QA/QC plan shall be submitted to the Department with the test protocols.

(4) For each CEMS, the permittee shall maintain records of performance test measurements, all performance evaluations, calibration checks, and all adjustment and maintenance activities.

(5) The permittee shall maintain records of the following requirements using data from the CEMS (DAHS) to demonstrate compliance with established emission limits:

i) For NO<sub>x</sub>:

- (1) The 24-hour average lb/hr.
- (2) The 24-hour average parts per million by volume (on a dry standard cubic foot basis, corrected to 15% O<sub>2</sub>).
- (3) The daily-rolling 30-day average lb/MWh (calculated in accordance with NSPS KKKK, 60.6350).
- (4) The daily-rolling 365-day total tons/year for the combined units (updated monthly by the 15<sup>th</sup> of the following month) including any emissions during routine or predictable startup, shutdown, and scheduled maintenance (SSM).

ii) For CO:

- (1) The one-hour average lb/hr.
- (2) The one-hour average ppmvd @ 15% O<sub>2</sub>.
- (3) The daily-rolling 365-day total tons/year for the combined units (updated monthly by the 15<sup>th</sup> of the following month) including any emissions during routine or predictable startup, shutdown, and scheduled maintenance (SSM).

iii) For VOC:

- (1) The 24-hour average lb/hr calculated by DAHS using the heat input and the emission factor determined by the most recent compliance test.
- (2) The 24-hour average CO concentration in ppmvd @ 15% O<sub>2</sub>, using the 1 hr average CO CEMS output (Compliance with the 24-hr average CO concentration limits in ppmvd@15% O<sub>2</sub> shall also demonstrate compliance with the 24-hr average VOC concentration in ppmvd@15% O<sub>2</sub>).
- (3) The daily-rolling 365-day total tons/year for the combined units (updated monthly by the 15<sup>th</sup> of the following month) including any emissions during routine or predictable startup, shutdown, and scheduled maintenance (SSM).

iv) For SO<sub>2</sub>:

- (1) One-hour average lb/hr calculated by DAHS using the heat input and the emission factor calculated using (1) Equation D-1h from 40 CFR 75, Appendix D, Section 2.3.2.1.1 and (2) the sulfur content from the current valid tariff or

annual sulfur sampling results. Additionally, 40 CFR 75, Appendix D, Section 2.3.1.1 may also be used for the SO<sub>2</sub> emission factor as applicable.

- (2) The daily-rolling 30-day average lb/MMBtu calculated by the DAHS using (1) Equation D-1h from 40 CFR 75, Appendix D, Section 2.3.2.1.1 and (2) the sulfur content from the current valid tariff or annual sulfur sampling results. Additionally, 40 CFR 75, Appendix D, Section 2.3.1.1 may also be used for the SO<sub>2</sub> emission factor as applicable.
  - (3) The daily-rolling 365-day total tons/year for the combined units (updated monthly by the 15<sup>th</sup> of the following month) including any emissions during routine or predictable startup, shutdown, and scheduled maintenance (SSM).
- v) For TSP/PM<sub>10</sub>/PM<sub>2.5</sub>:
- (1) The 24-hour average lb/hr calculated by DAHS using the heat input and the emission factor determined by the most recent compliance test required by Condition A401.A.
  - (2) The daily-rolling 24-hour average lb/MMBtu rates of TSP and PM<sub>10</sub> calculated by direct conversion of the hourly emissions calculated above in v)(1). This requirement is not applicable for PM<sub>2.5</sub>.
  - (3) The daily-rolling 365-day total tons/year emissions calculated by DAHS using the heat input and the emission factor determined by the most recent initial compliance test required by Condition A401.A. The ton per year emissions shall include any emissions during routine or predictable startup, shutdown, and scheduled maintenance (SSM).

**Reporting:** All CEMS shall be subject to the notification requirements of 40 CFR 60.7. The QA/QC plan shall be submitted to the Department with the Compliance Test Protocols.

D. Temperature and Static Pressure Drop for Catalyst Beds For Units HOBB-1/DB-1 and HOBB-2/DB-2

**Requirement:** The permittee shall monitor the temperature and static pressure drop. A thermocouple shall be installed at the inlet of the catalyst bed of SCR-1 and SCR-2.

**Monitoring:** The permittee shall continuously monitor the temperature at the inlet of each SCR catalyst bed, and static pressure drop from the inlet of the CatOx to the outlet of the SCR catalyst bed.

**Recordkeeping:**

- (1) The permittee shall monitor and record all the instances in which the SCR monitors above are not in operation or out of calibration specifications.
- (2) The permittee shall develop and maintain on-site a procedure to monitor SCR catalyst activity, to predict its remaining active life and to define parameters for catalyst replacement.

**Reporting:** The permittee shall report in accordance with Section B110.

## E. Ammonia Injection For Units HOBB-1/DB-1 and HOBB-2/DB-2

**Requirement:**

- (1) Ammonia injection shall commence when the inlet temperature to the ammonia injection grid has exceeded 582 °F. This condition is included to reduce NO<sub>x</sub> emissions during startup.
- (2) The facility shall not store or use aqueous ammonia in concentrations greater than 19% in SCR-1 and SCR-2. However, if aqueous ammonia in concentrations greater than 20% is utilized, storage shall be limited to 20,000 pounds.
- (3) Annual compliance testing is required on Stacks 1 and 2 for ammonia. When the measured concentration equals or exceeds 75% of the permitted limit, the permittee shall determine the catalyst activity and schedule replacement in accordance with the procedures required in A401.D.

**Monitoring:** The permittee shall monitor the quantity of aqueous ammonia injected into each SCR system on an hourly basis.

**Recordkeeping:**

- (1) The ammonia injection systems shall be inspected on a daily basis to ensure proper operation.
- (2) The permittee shall maintain records of the following requirements using data from the annual compliance test to demonstrate compliance with established emission limits:
- i) The hourly lb/hr emission rate observed during the most recent annual compliance test.
  - ii) The daily-rolling 365-day total tons/year for the combined units calculated by the daily hours of operation times the hourly emission rate observed during the most recent annual compliance test (updated monthly by the 15<sup>th</sup> of the following month).

**Reporting:** The permittee shall report in accordance with Section B110.

## F. Mode of Operation For Units HOBB-1/DB-1 and HOBB-2/DB-2

**Requirement:** To verify compliance with the allowable emission limits during each operating mode in Table 106.A, the ton per year limits in Table 106.A, and with the total annual operating hour limit in Condition A108.B. The modes of operation include startup, shutdown, non-duct-burning, and duct burning.

**Monitoring:** The permittee shall monitor, using the CEMS and DAHS system, the start and stop times and dates of each operating mode and the total unit operating hours, as defined in 40 CFR 60.4420, for each Turbine (Units HOBB-1/DB-1 and HOBB-2/DB-2) on an hourly, daily, monthly and monthly rolling 12-month total basis.

**Recordkeeping:** For each turbine and each mode, the permittee shall record the operating mode (startup, non-duct burning, duct burning, or shutdown), the date, and the mode start time and end time.

The permittee shall also record the total operating hours of each turbine on a monthly rolling 12-month basis.

**Reporting:** The permittee shall report in accordance with Section B110.

G. Gas Flow Rate and Data for Emissions Estimates For Units HOBB-1/DB-1 and HOBB-2/DB-2

**Requirement:** To measure the heat input (MMBtu/hr) for determining emission estimates for VOC, SO<sub>x</sub>, TSP/PM<sub>10</sub>/PM<sub>2.5</sub> per Condition A401.C and meet acid rain requirements, the permittee shall install a natural gas fuel flow monitor or equivalent measuring device shall be installed on Units HOBB-1, HOBB-2, DB-1 and DB-2 and meet the initial certification requirements of 40 CFR Part 75, Appendix D.2.1.5, and the quality assurance requirements of 40 CFR Part 75, Appendix D.2.1.6.

**Monitoring:**

(1) The permittee shall monitor the total volumetric flow of natural gas consumed by each combustion Turbine and duct burner on a daily, monthly, and monthly rolling 12-month total basis.

(2) For time periods outside of compliance testing, exhaust gas flow shall be determined by EPA Method 19 (F factors) or another approved method as determined by the Department.

**Recordkeeping:** The permittee shall keep records in accordance with Section B109.

**Reporting:** The permittee shall report in accordance with Section B110.

H. Cooling Tower Monitoring (Unit AC-1, 2, 3)

**Requirement:**

(1) The cooling towers shall be inspected on a daily basis to ensure they are being operated as described in the permit application.

(2) The facility shall not use any cooling water additives containing heavy metals such as chromium in the cooling tower.

(3) The total dissolved solids (TDS) from the cooling tower basin shall not exceed 3,000 parts per million (ppm).

**Monitoring:** The permittee shall inspect the cooling towers daily and monitor and record the TDS concentration (ppm) in the cooling tower basins on a daily basis. A written copy of the procedure used to determine the TDS concentration shall be kept on-site and made available to the Department upon request.

**Recordkeeping:** The permittee shall, in addition to the TDS records above, keep records of the cooling tower daily inspections and the cooling tower chemical additives used in accordance with Section B109.

**Reporting:** The permittee shall report in accordance with Section B110.

**A402 Engines**

A. 40 CFR 60, Subpart IIII (Unit G-1)

**Requirements:** The permittee shall comply with the applicable requirements of 40 CFR Part 60, Subpart IIII.

**Monitoring:** The permittee shall comply with the applicable monitoring requirements of 40 CFR 60 Subparts A and IIII.

**Recordkeeping:** The permittee shall comply with the applicable recordkeeping requirements of 40 CFR 60 Subparts A and IIII.

<b>Reporting:</b> The permittee shall comply with the applicable reporting requirements of 40 CFR 60 Subparts A and IIII.
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B. 40 CFR 63, Subpart ZZZZ (Units G-1 and FP-1)

<b>Requirement:</b> The units are subject to 40 CFR 63, Subpart ZZZZ and the permittee shall comply with all applicable requirements of Subpart A and Subpart ZZZZ. However, Stationary RICE subject to Regulations under 40 CFR Part 60 must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part. (40 CFR 63.6590(c))
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<b>Monitoring:</b> The permittee shall comply with all applicable monitoring requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.
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<b>Recordkeeping:</b> The permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63, Subpart A and Subpart ZZZZ, including but not limited to 63.6655 and 63.10.
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<b>Reporting:</b> The permittee shall comply with all applicable reporting requirements of 40 CFR 63, Subpart A and ZZZZ, including but not limited to 63.6645, 63.6650, 63.9, and 63.10.
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## **PART B    GENERAL CONDITIONS**

### **B100    Introduction**

- A. The Department has reviewed the permit application for the proposed construction/modification/revision and has determined that the provisions of the Act and ambient air quality standards will be met. Conditions have been imposed in this permit to assure continued compliance. 20.2.72.210.D NMAC, states that any term or condition imposed by the Department on a permit is enforceable to the same extent as a regulation of the Environmental Improvement Board.

### **B101    Legal**

- A. The contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision. Unless modified by conditions of this permit, the permittee shall construct or modify and operate the Facility in accordance with all representations of the application and supplemental submittals that the Department relied upon to determine compliance with applicable regulations and ambient air quality standards. If the Department relied on air quality modeling to issue this permit, any change in the parameters used for this modeling shall be submitted to the Department for review. Upon the Department's request, the permittee shall submit additional modeling for review by the Department. Results of that review may require a permit modification. (20.2.72.210.A NMAC)
- B. Any future physical changes, changes in the method of operation or changes in restricted area may constitute a modification as defined by 20.2.72 NMAC, Construction Permits. Unless the source or activity is exempt under 20.2.72.202

NMAC, no modification shall begin prior to issuance of a permit. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)

- C. Changes in plans, specifications, and other representations stated in the application documents shall not be made if they cause a change in the method of control of emissions or in the character of emissions, will increase the discharge of emissions or affect modeling results. Any such proposed changes shall be submitted as a revision or modification. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)
- D. The permittee shall establish and maintain the property's Restricted Area as identified in plot plan submitted with the application. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)
- E. Applications for permit revisions and modifications shall be submitted to:  
Program Manager, Permits Section  
New Mexico Environment Department  
Air Quality Bureau  
525 Camino de los Marquez, Suite 1  
Santa Fe, NM 87505
- F. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the source including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (20.2.7.109, 20.2.72.210.A, 20.2.72.210.B, 20.2.72.210.C, 20.2.72.210.E NMAC) The establishment of allowable malfunction emission limits does not supersede this requirement.

#### **B102 Authority**

- A. This permit is issued pursuant to the Air Quality Control Act (Act) and regulations adopted pursuant to the Act including Title 20, Chapter 2, Part 72 of the New Mexico Administrative Code (NMAC), (20.2.72 NMAC), Construction Permits and is enforceable pursuant to the Act and the air quality control regulations applicable to this source.
- B. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the delegation and exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

#### **B103 Annual Fee**

- A. The Department will assess an annual fee for this Facility. The regulation 20.2.75 NMAC set the fee amount at \$1,500 through 2004 and requires it to be adjusted



annually for the Consumer Price Index on January 1. The current fee amount is available by contacting the Department or can be found on the Department's website. The AQB will invoice the permittee for the annual fee amount at the beginning of each calendar year. This fee does not apply to sources which are assessed an annual fee in accordance with 20.2.71 NMAC. For sources that satisfy the definition of "small business" in 20.2.75.7.F NMAC, this annual fee will be divided by two. (20.2.75.11 NMAC)

- B. All fees shall be remitted in the form of a corporate check, certified check, or money order made payable to the "NM Environment Department, AQB" mailed to the address shown on the invoice and shall be accompanied by the remittance slip attached to the invoice.

#### **B104 Appeal Procedures**

- A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for hearing before the Environmental Improvement Board. The petition shall be made in writing to the Environmental Improvement Board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered and attach a copy of the permitting action for which review is sought. Unless a timely request for hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to: (20.2.72.207.F NMAC)

Secretary, New Mexico Environmental Improvement Board  
1190 St. Francis Drive, Harold Runnels Bldg  
P.O. Box 5469  
Santa Fe, New Mexico 87502-5469

#### **B105 Submittal of Reports and Certifications**

- A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to [Stacktest.AQB@state.nm.us](mailto:Stacktest.AQB@state.nm.us) or as directed by the Department.
- B. Excess Emission Reports shall be submitted as directed by the Department. (20.2.7.110 NMAC)
- C. Routine reports shall be submitted to the mailing address below, or as directed by the Department:

Manager, Compliance and Enforcement Section  
New Mexico Environment Department  
Air Quality Bureau  
525 Camino de los Marquez, Suite 1  
Santa Fe, NM 87505

**B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations**

- A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c), unless specifically exempted in the applicable subpart.
- B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart.

**B107 Startup, Shutdown, and Maintenance Operations**

- A. The establishment of permitted startup, shutdown, and maintenance (SSM) emission limits does not supersede the requirements of 20.2.7.14.A NMAC. Except for operations or equipment subject to Condition B106, the permittee shall establish and implement a plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan) and shall operate in accordance with the procedures set forth in the plan. (SSM work practice plan) (20.2.7.14.A NMAC)

**B108 General Monitoring Requirements**

- A. These requirements do not supersede or relax requirements of federal regulations.
- B. The following monitoring requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission

limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.

- C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Compliance and Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.
- D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke the monitoring period exemption at B108.D(2), hours of operation shall be monitored and recorded.
  - (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
  - (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.
  - (3) If invoking the monitoring **period** exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during any five-year period.
- E. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.

- F. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- G. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance.

### **B109 General Recordkeeping Requirements**

- A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any other applicable requirements that become effective after permit issuance. The minimum information to be included in these records is:
  - (1) equipment identification (include make, model and serial number for all tested equipment and emission controls);
  - (2) date(s) and time(s) of sampling or measurements;
  - (3) date(s) analyses were performed;
  - (4) the qualified entity that performed the analyses;
  - (5) analytical or test methods used;
  - (6) results of analyses or tests; and
  - (7) operating conditions existing at the time of sampling or measurement.
- B. Except as provided in the Specific Conditions, records shall be maintained on-site or at the permittee's local business office for a minimum of two (2) years from the time of recording and shall be made available to Department personnel upon request. Sources subject to 20.2.70 NMAC "Operating Permits" shall maintain records on-site for a minimum of five (5) years from the time of recording.
- C. Malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):
  - (1) The permittee shall keep records of all events subject to the plan to minimize emissions during routine or predictable SSM. (20.2.7.14.A NMAC)
  - (2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, a description of the event, and a description of the cause of the event. This record

also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.

- (3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits, including the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 63.2, 20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized malfunction emission limit.

#### **B110 General Reporting Requirements**

(20.2.72 NMAC Sections 210 and 212)

- A. Records and reports shall be maintained on-site or at the permittee's local business office unless specifically required to be submitted to the Department or EPA by another condition of this permit or by a state or federal regulation. Records for unmanned sites may be kept at the nearest business office.
- B. The permittee shall notify the Department's Compliance Reporting Section using the current Submittal Form posted to NMED's Air Quality web site under Compliance and Enforcement/Submittal Forms in writing of, or provide the Department with (20.2.72.212.A and B):
  - (1) the anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date. Notification may occur prior to issuance of the permit, but actual startup shall not occur earlier than the permit issuance date;
  - (2) after receiving authority to construct, the equipment serial number as provided by the manufacturer or permanently affixed if shop-built and the actual date of initial startup of each new or modified source within fifteen (15) days after the startup date; and
  - (3) the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date.

- C. The permittee shall notify the Department's Permitting Program Manager, in writing of, or provide the Department with (20.2.72.212.C and D):
- (1) any change of operators or any equipment substitutions within fifteen (15) days of such change;
  - (2) any necessary update or correction no more than sixty (60) days after the operator knows or should have known of the condition necessitating the update or correction of the permit.
- D. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.
- E. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.

### **B111 General Testing Requirements**

#### **A. Compliance Tests**

- (1) Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)
- (2) Compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.
- (3) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the

NSR Permit No. PSD 3449-M2

Page 29 of 39

Department approval, be determined using the arithmetic mean of the results of the two other runs.

- (4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to the approval of the Department.
- (5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.
- (6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

**B. EPA Reference Method Tests**

- (1) All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of CFR Title 40, Part 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by CFR Title 40, Part 60, Appendix A:
  - (a) Methods 1 through 4 for stack gas flowrate
  - (b) Method 5 for TSP
  - (c) Method 6C and 19 for SO<sub>2</sub>
  - (d) Method 7E for NO<sub>x</sub> (test results shall be expressed as nitrogen dioxide (NO<sub>2</sub>) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO<sub>2</sub> is equivalent to 1.194 x 10<sup>-7</sup> lb/SCF)
  - (e) Method 9 for opacity
  - (f) Method 10 for CO
  - (g) Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).
  - (h) Method 7E or 20 for Turbines per 60.335 or 60.4400
  - (i) Method 29 for Metals
  - (j) Method 201A for filterable PM<sub>10</sub> and PM<sub>2.5</sub>
  - (k) Method 202 for condensable PM
  - (l) Method 320 for organic Hazardous Air Pollutants (HAPs)

- (m) Method 25A for VOC reduction efficiency
- (n) Method 30B for Mercury
- (2) Alternative test method(s) may be used if the Department approves the change

C. Periodic Monitoring and Portable Analyzer Requirements

- (1) Periodic emissions tests (periodic monitoring) may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of ASTM D 6522-00. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.
- (2) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 20 minutes.  
  
Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.
- (3) Testing of emissions shall be conducted in accordance with the requirements at Section B108.E.
- (4) During emissions tests, pollutant, O<sub>2</sub> concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.
- (5) Pollutant emission rate shall be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf) and fuel heating value (Btu/scf) obtained during the test.

D. Test Procedures:

- (1) The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test date and allow a representative of the Department to be present at the test.
- (2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.
- (3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.
- (4) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.



The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Method 1 or ASTM D 6522-00 as applicable.

- (5) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed
- (6) Unless otherwise indicated by Specific Conditions or regulatory requirements, test reports shall be submitted to the Department no later than 30 days after completion of the test.

### **B112 Compliance**

- A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)
- B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.72.210.B.4 NMAC)
- C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit.

### **B113 Permit Cancellation and Revocation**

- A. The Department may revoke this permit if the applicant or permittee has knowingly and willfully misrepresented a material fact in the application for the permit. Revocation will be made in writing, and an administrative appeal may be taken to the Secretary of the Department within thirty (30) days. Appeals will be handled in

accordance with the Department's Rules Governing Appeals From Compliance Orders.

- B. The Department shall automatically cancel any permit for any source which ceases operation for five (5) years or more, or permanently. Reactivation of any source after the five (5) year period shall require a new permit. (20.2.72 NMAC)
- C. The Department may cancel a permit if the construction or modification is not commenced within two (2) years from the date of issuance or if, during the construction or modification, work is suspended for a total of one (1) year. (20.2.72 NMAC)

#### **B114 Notification to Subsequent Owners**

- A. The permit and conditions apply in the event of any change in control or ownership of the Facility. No permit modification is required in such case. However, in the event of any such change in control or ownership, the permittee shall notify the succeeding owner of the permit and conditions and shall notify the Department's Program Manager, Permits Section of the change in ownership within fifteen (15) days of that change. (20.2.72.212.C NMAC)
- B. Any new owner or operator shall notify the Department's Program Manager, Permits Section, within thirty (30) days of assuming ownership, of the new owner's or operator's name and address. (20.2.73.200.E.3 NMAC)

#### **B115 Asbestos Demolition**

- A. Before any asbestos demolition or renovation work, the permittee shall determine whether 40 CFR 61 Subpart M, National Emissions Standards for Asbestos applies. If required, the permittee shall notify the Department's Program Manager, Compliance and Enforcement Section using forms furnished by the Department.

#### **B116 Short Term Engine Replacement**

- A. The following Alternative Operating Scenario (AOS) addresses engine breakdown or periodic maintenance and repair, which requires the use of a short term replacement engine. The following requirements do not apply to engines that are exempt per 20.2.72.202.B(3) NMAC. Changes to exempt engines must be reported in accordance with 20.2.72.202.B NMAC. A short term replacement engine may be substituted for any engine allowed by this permit for no more than 120 days in any rolling twelve month period per permitted engine. The compliance demonstrations required as part of this AOS are in addition to any other compliance demonstrations required by this permit.

- (1) The permittee may temporarily replace an existing engine that is subject to the emission limits set forth in this permit with another engine regardless of manufacturer, model, and horsepower without modifying this permit. The permittee shall submit written notification to the Department within 15 days of the date of engine substitution according to condition B110.C(1).
- (a) The potential emission rates of the replacement engine shall be determined using the replacement engine's manufacturer specifications and shall comply with the existing engine's permitted emission limits.
- (b) The direction of the exhaust stack for the replacement engine shall be either vertical or the same direction as for the existing engine. The replacement engine's stack height and flow parameters shall be at least as effective in the dispersion of air pollutants as the modeled stack height and flow parameters for the existing permitted engine. The following equation may be used to show that the replacement engine disperses pollutants as well as the existing engine. The value calculated for the replacement engine on the right side of the equation shall be equal to or greater than the value for the existing engine on the left side of the equation. The permitting page of the Air Quality Bureau website contains a spreadsheet that performs this calculation.

EXISTING ENGINEREPLACEMENT ENGINE

$$\frac{[(g) \times (h1)] + [(v1)^2/2] + [(c) \times (T1)]}{q1} \leq \frac{[(g) \times (h2)] + [(v2)^2/2] + [(c) \times (T2)]}{q2}$$

Where

g = gravitational constant = 32.2 ft/sec<sup>2</sup>

h1 = existing stack height, feet

v1 = exhaust velocity, existing engine, feet per second

c = specific heat of exhaust, 0.28 BTU/lb-degree F

T1 = absolute temperature of exhaust, existing engine = degree F + 460

q1 = permitted allowable emission rate, existing engine, lbs/hour

h2 = replacement stack height, feet

v2 = exhaust velocity, replacement engine, feet per second

T2 = absolute temperature of exhaust, replacement engine = degree F + 460

q2 = manufacturer's potential emission rate, replacement engine, lbs/hour

The permittee shall keep records showing that the replacement engine is at least as effective in the dispersion of air pollutants as the existing engine.

- (c) Test measurement of NO<sub>x</sub> and CO emissions from the temporary replacement engine shall be performed in accordance with Section B111

with the exception of Condition B111A(3) and B111B for EPA Reference Methods Tests or Section B111C for portable analyzer test measurements. Compliance test(s) shall be conducted within fifteen (15) days after the unit begins operation, and records of the results shall be kept according to section B109.B. This test shall be performed even if the engine is removed prior to 15 days on site.

- i. These compliance tests are not required for an engine certified under 40CFR60, subparts IIII, or JJJJ, or 40CFR63, subpart ZZZZ if the permittee demonstrates that one of these requirements causes such engine to comply with all emission limits of this permit. The permittee shall submit this demonstration to the Department within 48 hours of placing the new unit into operation. This submittal shall include documentation that the engine is certified, that the engine is within its useful life, as defined and specified in the applicable requirement, and shall include calculations showing that the applicable emissions standards result in compliance with the permit limits.
  - ii. These compliance tests are not required if a test was conducted by portable analyzer or by EPA Method test (including any required by 40CFR60, subparts IIII and JJJJ and 40CFR63, subpart ZZZZ) within the last 12 months. These previous tests are valid only if conducted at the same or lower elevation as the existing engine location prior to commencing operation as a temporary replacement. A copy of the test results shall be kept according to section B109.B.
- (d) Compliance tests for NO<sub>x</sub> and CO shall be conducted if requested by the Department in writing to determine whether the replacement engine is in compliance with applicable regulations or permit conditions.
- (e) Upon determining that emissions data developed according to B116.A.1(c) fail to indicate compliance with either the NO<sub>x</sub> or CO emission limits, the permittee shall notify the Department within 48 hours. Also within that time, the permittee shall implement one of the following corrective actions:
  - i. The engine shall be adjusted to reduce NO<sub>x</sub> and CO emissions and tested per B116.A.1(c) to demonstrate compliance with permit limits.
  - ii. The engine shall discontinue operation or be replaced with a different unit.
- (2) Short term replacement engines, whether of the same manufacturer, model, and horsepower, or of a different manufacturer, model, or horsepower, are subject to all federal and state applicable requirements, regardless of whether they are set

forth in this permit (including monitoring and recordkeeping), and shall be subject to any shield afforded by this permit.

- (3) The permittee shall maintain a contemporaneous record documenting the unit number, manufacturer, model number, horsepower, emission factors, emission test results, and serial number of any existing engine that is replaced, and the replacement engine. Additionally, the record shall document the replacement duration in days, and the beginning and end dates of the short term engine replacement.
  - (4) The permittee shall maintain records of a regulatory applicability determination for each replacement engine (including 40CFR60, subparts IIII and JJJJ and 40CFR63, subpart ZZZZ) and shall comply with all associated regulatory requirements.
- B. Additional requirements for replacement of engines at sources that are major as defined in regulation 20.2.74 NMAC, Permits – Prevention of Significant Deterioration, section 7.AF. For sources that are major under PSD, the total cumulative operating hours of the replacement engine shall be limited using the following procedure:
- (1) Daily, the actual emissions from the replacement engine of each pollutant regulated by this permit for the existing engine shall be calculated and recorded.
  - (2) The sum of the total actual emissions since the commencement of operation of the replacement engine shall not exceed the significant emission rates in Table 2 of 20.2.74 NMAC, section 502 for the time that the replacement engine is located at the facility.
- C. All records required by this section shall be kept according to section B109.

## **PART C MISCELLANEOUS**

### **C100 Supporting On-Line Documents**

- A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.
- (1) Excess Emission Form (for reporting deviations and emergencies)
  - (2) Universal Stack Test Notification, Protocol and Report Form and Instructions
  - (3) SOP for Use of Portable Analyzers in Performance Tests

**C101 Definitions**

- A. **“Daylight”** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <http://aa.usno.navy.mil/>. Alternatively, these times can be obtained from a Farmer’s Almanac or from <http://www.almanac.com/rise/>).
- B. **“Exempt Sources”** and **“Exempt Activities”** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 NMAC permitting actions.
- C. **“Fugitive Emission”** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- D. **“Insignificant Activities”** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. Note; insignificant activities are only valid for 20.2.70 NMAC permitting actions.
- E. **“Natural Gas”** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.631)
- F. **“Natural Gas Liquids”** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)
- G. **“National Ambient air Quality Standards”** means, unless otherwise modified, the primary (health-related) and secondary (welfare-based) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act.
- H. **“Night”** is the time period between sunset and sunrise, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <http://aa.usno.navy.mil/>. Alternatively, these times can be obtained from a Farmer’s Almanac or from <http://www.almanac.com/rise/>).
- I. **“Night Operation or Operation at Night”** is operating a source of emissions at night.
- J. **“NO<sub>2</sub>”** or "Nitrogen dioxide" means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term **"nitrogen dioxide,"** for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen

and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NO<sub>x</sub> or NO<sub>2</sub>. (20.2.2 NMAC)

- K. **"NO<sub>x</sub>"** see NO<sub>2</sub>
- L. **"Paved Road"** is a road with a permanent solid surface that can be swept essentially free of dust or other material to reduce air re-entrainment of particulate matter. To the extent these surfaces remain solid and contiguous they qualify as paved roads: concrete, asphalt, chip seal, recycled asphalt and other surfaces approved by the Department in writing.
- M. **"Potential Emission Rate"** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the federal Act.
- N. **"Restricted Area"** is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.
- O. **"Shutdown"** for requirements under 20.2.72 NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.
- P. **"SSM"** for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.
- (1) **"Shutdown"** for requirements under 20.2.7 NMAC, means the cessation of operation of any air pollution control equipment or process equipment.
- (2) **"Startup"** for requirements under 20.2.7 NMAC, means the setting into operation of any air pollution control equipment or process equipment.
- Q. **"Startup"** for requirements under 20.2.72 NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

**C102 Acronyms**

2SLB .....	2-stroke lean burn
4SLB .....	4-stroke lean burn
4SRB .....	4-stroke rich burn
acfm .....	actual cubic feet per minute
AFR .....	air fuel ratio
AP-42 .....	EPA Air Pollutant Emission Factors
AQB .....	Air Quality Bureau
AQCR .....	Air Quality Control Region
ASTM .....	American Society for Testing and Materials
Btu .....	British thermal unit
CAA .....	Clean Air Act of 1970 and 1990 Amendments
CEM .....	continuous emissions monitoring
cfh .....	cubic feet per hour
cfm .....	cubic feet per minute
CFR .....	Code of Federal Regulation
CI .....	compression ignition
CO .....	carbon monoxides
COMS .....	continuous opacity monitoring system
EIB .....	Environmental Improvement Board
EPA .....	United States Environmental Protection Agency
gr/100 cf .....	grains per one hundred cubic feet
gr/dscf .....	grains per dry standard cubic foot
GRI .....	Gas Research Institute
HAP .....	hazardous air pollutant
hp .....	horsepower
H <sub>2</sub> S .....	hydrogen sulfide
IC .....	internal combustion
KW/hr .....	kilowatts per hour
lb/hr .....	pounds per hour
lb/MMBtu .....	pounds per million British thermal unit
MACT .....	Maximum Achievable Control Technology
MMcf/hr .....	million cubic feet per hour
MMscf .....	million standard cubic feet
N/A .....	not applicable
NAAQS .....	National Ambient Air Quality Standards
NESHAP .....	National Emission Standards for Hazardous Air Pollutants
NG .....	natural gas
NGL .....	natural gas liquids
NMAAQs .....	New Mexico Ambient Air Quality Standards
NMAC .....	New Mexico Administrative Code
NMED .....	New Mexico Environment Department
NMSA .....	New Mexico Statutes Annotated



NO <sub>x</sub>	nitrogen oxides
NSCR	non-selective catalytic reduction
NSPS	New Source Performance Standard
NSR	New Source Review
PEM	parametric emissions monitoring
PM	particulate matter (equivalent to TSP, total suspended particulate)
PM <sub>10</sub>	particulate matter 10 microns and less in diameter
PM <sub>2.5</sub>	particulate matter 2.5 microns and less in diameter
pph	pounds per hour
ppmv	parts per million by volume
PSD	Prevention of Significant Deterioration
RATA	Relative Accuracy Test Assessment
RICE	reciprocating internal combustion engine
rpm	revolutions per minute
scfm	standard cubic feet per minute
SI	spark ignition
SO <sub>2</sub>	sulfur dioxide
SSM	Startup Shutdown Maintenance (see SSM definition)
TAP	Toxic Air Pollutant
TBD	to be determined
THC	total hydrocarbons
TSP	Total Suspended Particulates
tpy	tons per year
ULSD	ultra low sulfur diesel
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator Coordinate system
UTMH	Universal Transverse Mercator Horizontal
UTMV	Universal Transverse Mercator Vertical
VHAP	volatile hazardous air pollutant
VOC	volatile organic compounds

# Section 4

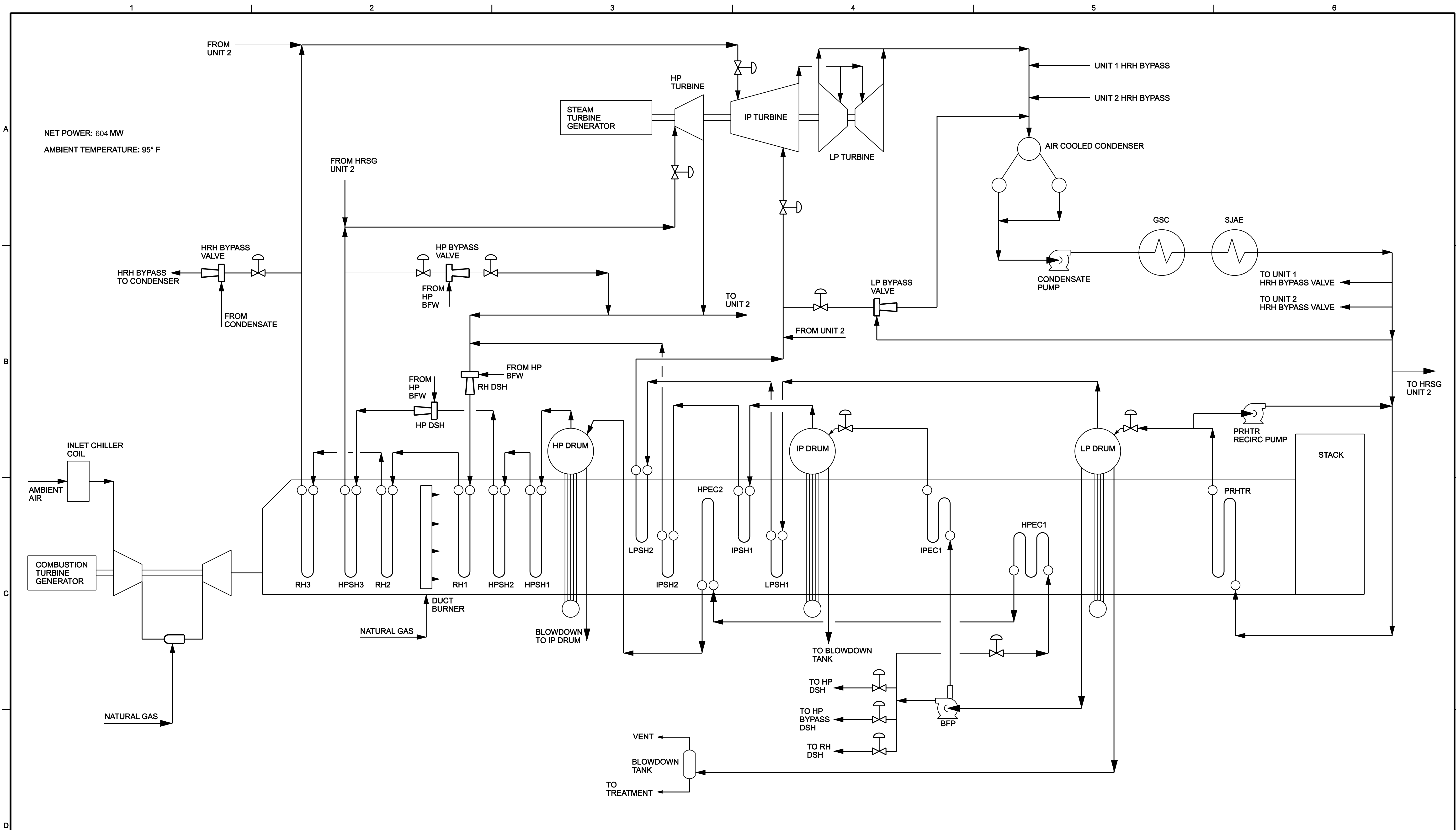
## Process Flow Sheet

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A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

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[A process flow diagram is attached.](#)



RESPONSIBLE ENGINEER PE #	NO.	DATE	REVISION	BY	CHK	REVISION APPROVAL	REV A	DATE 09/21/06	STATUS						SPS-EXCEL Colorado Energy Management HOBBS POWER STATION Hobbs, NM	PROCESS FLOW DIAGRAM		
	P1	09/07/06	ISSUED FOR PRELIMINARY DESIGN	EFC	BR	DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED	ISSUED	REV	DATE	DM	SDE	PEM			
	A	09/21/06	ISSUED FOR REVIEW	EFC	BR	CIVIL		ELECTRICAL		PRELIMINARY	P1	09/07/06	RP	BR	AW			
						STRUCTURAL		INST & CONTROL		FOR REVIEW AND APPROVAL	A					PROJECT NO. 349552		
						MECHANICAL		ARCHITECTURAL		APPROVED FOR CONSTRUCTION						HEAT BALANCE SHEET 1 2 x 1 MHI 501 F		
						PROCESS		ENVIRONMENTAL		REVISED & APPROVED FOR CONSTRUCTION								
						PIPING		GEN. ARRANG.								DWG. NO. HB-PR-10-10-01		
																REV. A		

# Section 5

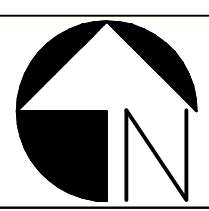
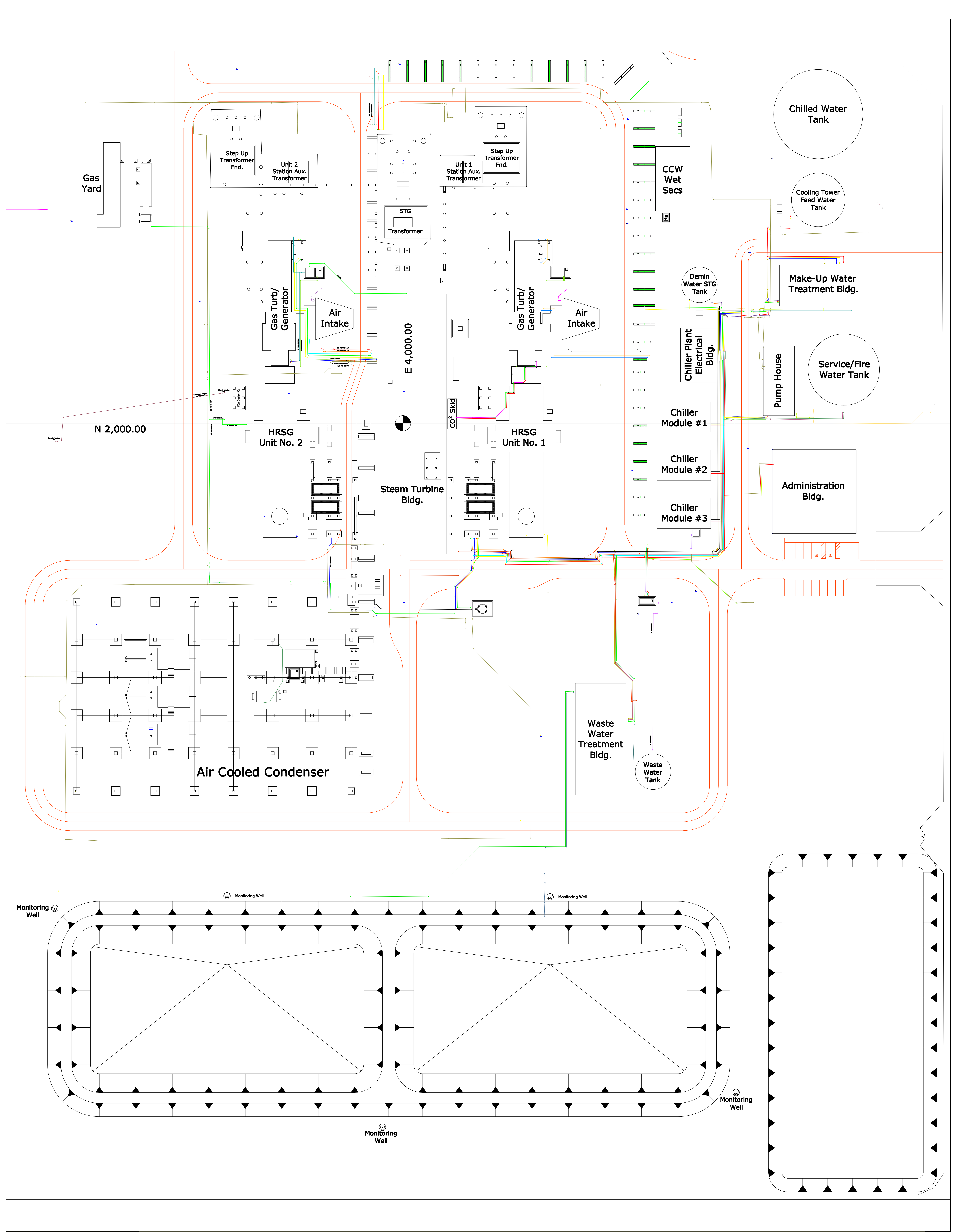
## Plot Plan Drawn To Scale

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A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

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[A Plot Plan drawn to scale is attached.](#)



# Section 6

## All Calculations

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**Show all calculations** used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

**Tank Flashing Calculations:** The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

**SSM Calculations:** It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.nmenv.state.nm.us/aqb/permit/app\\_form.html](http://www.nmenv.state.nm.us/aqb/permit/app_form.html)) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

**Glycol Dehydrator Calculations:** The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

**Road Calculations:** Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

**Significant Figures:**

A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

B. At least 5 significant figures shall be retained in all intermediate calculations.

C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

- (1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;
- (2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**
- (3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.
- (4) The final result of the calculation shall be expressed in the units of the standard.

**Control Devices:** In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

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As required by NMED, emission rate calculations are provided in the UA2 Form. No changes to the combined cycle emission rates are being requested at this time. During the development of the 2015 Title V renewal/significant revision permit application, it was discovered that the authorized emission rates for some of the auxiliary equipment (firewater pump, standby generator, auxiliary cooling towers and inlet chillers) did not match the represented vendor-data based emission rates that were provided in the initial Title V application, as submitted on June 8, 2009. No physical change or change in the method of operation has been made to these units, therefore, through this permitting action, LPP is requesting that emission rates for the firewater pump, the standby generator, the auxiliary cooling towers and the inlet chillers be updated to reflect the vendor-data. Changes include:

- **Firewater Pump (FP-1):** emission rates are calculated using vendor emission factors as provided by Clarke Detroit Diesel-Alisison. Vendor emission factors meet the regulatory requirements as established by 40 CFR 60, Subpart IIII. A copy of the manufacturer data is included with the calculations and in Section 7. This vendor data was provided with the initial Title V submittal on June 8, 2009. However, the authorized emission rates for NO<sub>x</sub>, VOC and TSP/PM<sub>10</sub>/PM<sub>2.5</sub> were never updated. There has been no physical change or change in the method of operation of the firewater pump since it was installed. LPP requests that the permit be updated to reflect the vendor-provided emission levels.
- **Standby Generator (G-1):** emission rates are calculated using vendor emission factors as provided by Volvo Penta TAD1641GE. Vendor emission factors meet the regulatory requirements as established by 40 CFR 60, Subpart IIII. A copy of the manufacturer data is included with the calculations and in Section 7. This vendor data was provided with the initial Title V submittal on June 8, 2009. However, the authorized emission rates for NO<sub>x</sub> were never updated. There has been no physical change or change in the method of operation of the standby generator since it was installed. LPP requests that the permit be updated to reflect vendor-provided emission levels.
- **Auxiliary Cooling Towers (AC-1, AC-2, and AC-3):** emission rates are calculated using the auxiliary cooling towers specifications and a drift rate factor of 0.001%. Authorized emission rates were estimated with a spray water flow rate smaller than the manufacturer data. There has been no physical change or change in the method of operation of the auxiliary cooling towers since they were installed. LPP requests that the TSP/PM<sub>10</sub>/PM<sub>2.5</sub> emission rates be updated accordingly.
- **Inlet Chillers (IC-1, IC-2, and IC-3):** emission rates are calculated using the inlet chillers specifications and a drift rate factor of 0.001%. Authorized emission rates were estimated with a water flow rate lower than that represented in the manufacturer data. There has been no physical change or change in the method of operation of the inlet chillers since they were installed. LPP requests that the TSP/PM<sub>10</sub>/PM<sub>2.5</sub> emission rates be updated accordingly.
- **Gasoline and Diesel Storage Tanks (T-7, T-8 and T-9):** emission rates are calculated using U.S. EPA AP 42 Tanks 4.09D software. These tanks are a source of insignificant VOC emissions. LPP requests that these tanks be included in the insignificant source list for the permit.

All other emission rates are carried forward from previous permit applications and no modifications are requested.

**HOBBS PSD APPLICABILITY ANALYSIS****Affected Sources Post-Project Maximum Allowable Annual Emissions, tpy**

Unit ID	Description	NOx	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	GHG
FP-1	Diesel Firewater Pump	0.4	0.1	0.01	0.03	0.01	0.01	25.28
G-1	Diesel Standby Generator	1.6	0.2	0.05	0.08	0.03	0.03	216.21
AC-1, AC-2, AC-3	Auxiliary Cooling Towers					0.2	0.001	
IC-1, IC-2, IC-3	Inlet Chillers					1.1	0.004	
T-7	Diesel Storage Tank			0.0001				
T-8	Diesel Storage Tank			0.00004				
T-9	Gasoline Storage Tank			0.09				
	Total	2.0	0.3	0.2	0.1	1.3	0.04	241.49

**Affected Sources Pre-Project Actual Annual Emissions, tpy (24 month average) <sup>(1)</sup>**

Unit ID	Description	NOx	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	GHG
FP-1	Diesel Firewater Pump	-	-	-	-	-	-	-
G-1	Diesel Standby Generator	-	-	-	-	-	-	-
AC-1, AC-2, AC-3	Auxiliary Cooling Towers					-	-	
IC-1, IC-2, IC-3	Inlet Chillers					-	-	
T-7	Diesel Storage Tank			-				
T-8	Diesel Storage Tank			-				
T-9	Gasoline Storage Tank			-				
	Total	-	-	-	-	-	-	-

Notes

(1) Pre-Project actuals for FP-1, G-1, AC-1, AC-2 and AC-3; and IC-1, IC-2 and IC-3 assumed to be zero as worst case scenario.

**Affected Sources Changes in Emissions, tpy  
(Post-Project Allowable, tpy) - (Pre-Project Actual, tpy)**

Unit ID	Description	NOx	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	GHG
FP-1	Diesel Firewater Pump	0.4	0.1	0.01	0.03	0.01	0.01	25.28
G-1	Diesel Standby Generator	1.6	0.2	0.05	0.08	0.03	0.03	216.21
AC-1, AC-2, AC-3	Auxiliary Cooling Towers	-	-	-	-	0.2	0.001	-
IC-1, IC-2, IC-3	Inlet Chillers	-	-	-	-	1.1	0.004	-
T-7	Diesel Storage Tank	-	-	0.0001	-	-	-	-
T-8	Diesel Storage Tank	-	-	0.00004	-	-	-	-
T-9	Gasoline Storage Tank	-	-	0.1	-	-	-	-

**PSD Analysis**

	NOx	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Total Increases Only	2.0	0.3	0.2	0.1	1.3	0.04
PSD Significance Level	40	100	40	40	15	10
PSD Significance Level Exceeded?	No	No	No	No	No	No



## SITEWIDE SPECIATED HAZARDOUS AIR POLLUTANTS (HAPs)

## Speciated HAP Emission Rates Summary Table

Hazardous Air Pollutants (HAPs)	FP-1		G-1		FH-1		FH-2		FH-3		T-7		T-8		T-9	
	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)
Benzene <sup>(2)</sup>	2.89E-03	1.45E-04	4.12E-03	1.03E-03	4.88E-06	2.14E-05	4.88E-06	2.14E-05	4.88E-06	2.14E-05					2.40E-01	4.49E-03
Toluene <sup>(2)</sup>	1.27E-03	6.34E-05	1.49E-03	3.73E-04	7.90E-06	3.46E-05	7.90E-06	3.46E-05	7.90E-06	3.46E-05					0.98	0.02
Xylenes <sup>(2)</sup>	8.84E-04	4.42E-05	1.02E-03	2.56E-04											0.49	0.01
Propylene	8.00E-03	4.00E-04	1.48E-02	3.70E-03												
1,3-Butadiene <sup>(2)</sup>	1.21E-04	6.06E-06														
Formaldehyde <sup>(2)</sup>	0.004	0.0002	0.0004	0.0001	0.0002	0.001	0.0002	0.001	0.0002	0.001						
Acetaldehyde <sup>(2)</sup>	2.38E-03	1.19E-04	1.34E-04	3.34E-05												
Acrolein <sup>(2)</sup>	2.87E-04	1.43E-05	4.18E-05	1.04E-05												
Dichlorobenzene <sup>(2)</sup>					2.79E-06	1.22E-05	2.79E-06	1.22E-05	2.79E-06	1.22E-05						
Hexane <sup>(2)</sup>					4.18E-03	1.83E-02	4.18E-03	1.83E-02	4.18E-03	0.02						
Cumene <sup>(2)</sup>											1.42E-04	8.50E-07	1.42E-04	8.50E-07	1.96E-01	3.66E-03
Styrene <sup>(2)</sup>															4.89E-02	9.16E-04
MTBE <sup>(2)</sup>															0.73	0.01
Naphthalene <sup>(2),(3)</sup>	2.63E-04	1.31E-05	6.89E-04	1.72E-04	1.42E-06	6.21E-06	1.42E-06	6.21E-06	1.42E-06	6.21E-06	9.79E-02	1.83E-03	9.79E-02	1.83E-03	9.79E-02	1.83E-03
Acenaphthylene <sup>(3)</sup>	1.57E-05	7.85E-07	4.90E-05	1.22E-05	4.18E-09	1.83E-08	4.18E-09	1.83E-08	4.18E-09	1.83E-08						
Acenaphthene <sup>(3)</sup>	4.40E-06	2.20E-07	2.48E-05	6.21E-06	4.18E-09	1.83E-08	4.18E-09	1.83E-08	4.18E-09	1.83E-08						
Fluorene <sup>(3)</sup>	9.05E-05	4.53E-06	6.79E-05	1.70E-05	6.51E-09	2.85E-08	6.51E-09	2.85E-08	6.51E-09	2.85E-08						
Phenanthrene <sup>(3)</sup>	9.12E-05	4.56E-06	2.16E-04	5.41E-05	3.95E-08	1.73E-07	3.95E-08	1.73E-07	3.95E-08	1.73E-07						
Anthracene <sup>(3)</sup>	5.80E-06	2.90E-07	6.52E-06	1.63E-06	5.58E-09	2.44E-08	5.58E-09	2.44E-08	5.58E-09	2.44E-08						
Fluoranthene <sup>(3)</sup>	2.36E-05	1.18E-06	2.14E-05	5.34E-06	6.97E-09	3.05E-08	6.97E-09	3.05E-08	6.97E-09	3.05E-08						
Pyrene <sup>(3)</sup>	1.48E-05	7.41E-07	1.97E-05	4.92E-06	1.16E-08	5.09E-08	1.16E-08	5.09E-08	1.16E-08	5.09E-08						
Benzo(a)anthracene <sup>(3)</sup>	5.21E-06	2.60E-07	3.30E-06	8.25E-07	4.18E-09	1.83E-08	4.18E-09	1.83E-08	4.18E-09	1.83E-08						
Chrysene <sup>(3)</sup>	1.09E-06	5.47E-08	8.11E-06	2.03E-06	4.18E-09	1.83E-08	4.18E-09	1.83E-08	4.18E-09	1.83E-08						
Benzo(b)fluoranthene <sup>(3)</sup>	3.07E-07	1.54E-08	5.89E-06	1.47E-06	4.18E-09	1.83E-08	4.18E-09	1.83E-08	4.18E-09	1.83E-08						
Benzo(k)fluoranthene <sup>(3)</sup>	4.81E-07	2.40E-08	1.16E-06	2.89E-07	4.18E-09	1.83E-08	4.18E-09	1.83E-08	4.18E-09	1.83E-08						
Benzo(a)pyrene <sup>(3)</sup>	5.83E-07	2.91E-08	1.36E-06	3.41E-07	2.79E-09	1.22E-08	2.79E-09	1.22E-08	2.79E-09	1.22E-08						
Indeno(1,2,3-cd)pyrene <sup>(3)</sup>	1.16E-06	5.81E-08	2.20E-06	5.49E-07	4.18E-09	1.83E-08	4.18E-09	1.83E-08	4.18E-09	1.83E-08						
Dibenz(a,h)anthracene <sup>(3)</sup>	1.81E-06	9.04E-08	1.84E-06	4.59E-07	2.79E-09	1.22E-08	2.79E-09	1.22E-08	2.79E-09	1.22E-08						
Benzo(g,h,i)perylene <sup>(3)</sup>	1.52E-06	7.58E-08	2.95E-06	7.37E-07	2.79E-09	1.22E-08	2.79E-09	1.22E-08	2.79E-09	1.22E-08						
2-Methylnaphthalene <sup>(3)</sup>					5.58E-08	2.44E-07	5.58E-08	2.44E-07	5.58E-08	2.44E-07						
3-Methylchloranthrene <sup>(3)</sup>					4.18E-09	1.83E-08	4.18E-09	1.83E-08	4.18E-09	1.83E-08						
7,12-Dimethyl benz(a)anthracene <sup>(3)</sup>					3.72E-08	1.63E-07	3.72E-08	1.63E-07	3.72E-08	1.63E-07						
Ethylbenzene											4.73E-04	3.80E-07	4.73E-04	3.80E-07	1.96E-01	3.66E-03
PAHs			1.12E-03	2.81E-04												
Propylene Oxide																
Arsenic					4.65E-07	2.04E-06										
Beryllium					2.79E-08	1.22E-07										
Cadmium					2.56E-06	1.12E-05										
Chromium					3.25E-06	1.42E-05										
Cobalt					1.95E-07	8.55E-07										
Manganese					8.83E-07	3.87E-06										
Mercury <sup>(2)</sup>					6.04E-07	2.65E-06										
Nickel					4.88E-06	2.14E-05										
Selenium					5.58E-08	2.44E-07										
<b>TOTAL</b>	<b>2.00E-02</b>	<b>0.001</b>	<b>0.02</b>	<b>0.006</b>	<b>0.004</b>	<b>0.02</b>	<b>0.004</b>	<b>0.02</b>	<b>0.004</b>	<b>0.02</b>	<b>0.10</b>	<b>0.002</b>	<b>0.10</b>	<b>0.002</b>	<b>3.37</b>	<b>0.06</b>

## Notes:

(1) Combined cycle units total HAPs are reduced by the oxidation catalyst on Catalyst Reduction Control = 68% Sims Roy, Emission Standards Division (Docket A-95-51, December 30, 1990)

(2) Hazardous air pollutant listed in the Clean Air Act.

(3) HAP because it is Polycyclic Aromatic Hydrocarbon (PAH).

(4) Table 2-1: Stack Exit and Fugitive Emission Rates for HAPs and TAPs reports only if the entire facility emits the HAP at a rate greater than or equal to 1 tpy

## SITEWIDE SPECIATED HAZARDOUS AIR POLLUTANTS (HAPs)

Speciated HAP Emission Rates Summary Table

Hazardous Air Pollutants (HAPs)	HOBB-1 / DB-1 <sup>(1)</sup>		HOBB-2 / DB-2 <sup>(1)</sup>		Total Sitewide	
	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)	Max. Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)
Benzene <sup>(2)</sup>	7.28E-03	0.03	0.01	0.03	0.26	0.06
Toluene <sup>(2)</sup>	0.08	0.30	0.08	0.30	1.14	0.61
Xylenes <sup>(2)</sup>	0.04	0.15	0.04	0.15	0.57	0.30
Propylene					0.02	0.004
1,3-Butadiene <sup>(2)</sup>	2.52E-04	9.74E-04	2.52E-04	9.74E-04	0.001	0.002
<b>Formaldehyde <sup>(2)</sup></b>	<b>0.14</b>	<b>0.54</b>	<b>0.14</b>	<b>0.54</b>	<b>0.28</b>	<b>1.08</b>
Acetaldehyde <sup>(2)</sup>	0.02	0.09	0.02	0.09	0.05	0.18
Acrolein <sup>(2)</sup>	3.76E-03	0.01	3.76E-03	0.01	0.01	0.03
Dichlorobenzene <sup>(2)</sup>	1.38E-04	2.38E-04	1.38E-04	2.38E-04	2.84E-04	5.12E-04
Hexane <sup>(2)</sup>	0.21	0.36	0.21	0.36	0.82	0.78
Cumene <sup>(2)</sup>					0.20	3.66E-03
Styrene <sup>(2)</sup>					0.05	9.16E-04
MTBE <sup>(2)</sup>					0.73	1.37E-02
Naphthalene <sup>(2),(3)</sup>	8.33E-04	3.07E-03	8.33E-04	3.07E-03	0.296	1.18E-02
Acenaphthylene <sup>(3)</sup>					6.47E-05	1.31E-05
Acenaphthene <sup>(3)</sup>					2.92E-05	6.48E-06
Fluorene <sup>(3)</sup>					1.58E-04	2.16E-05
Phenanthrene <sup>(3)</sup>					3.08E-04	5.92E-05
Anthracene <sup>(3)</sup>					1.23E-05	1.99E-06
Fluoranthene <sup>(3)</sup>					4.50E-05	6.62E-06
Pyrene <sup>(3)</sup>					3.45E-05	5.81E-06
Benzo(a)anthracene <sup>(3)</sup>					8.52E-06	1.14E-06
Chrysene <sup>(3)</sup>					9.22E-06	2.14E-06
Benzo(b)fluoranthene <sup>(3)</sup>					6.21E-06	1.54E-06
Benzo(k)fluoranthene <sup>(3)</sup>					1.65E-06	3.68E-07
Benzo(a)pyrene <sup>(3)</sup>					1.95E-06	4.07E-07
Indeno(1,2,3-cd)pyrene <sup>(3)</sup>					3.37E-06	6.62E-07
Dibenz(a,h)anthracene <sup>(3)</sup>					3.65E-06	5.86E-07
Benzo(g,h,i)perylene <sup>(3)</sup>					4.47E-06	8.50E-07
2-Methylnaphthalene <sup>(3)</sup>					1.67E-07	7.33E-07
3-Methylchloranthrene <sup>(3)</sup>					1.25E-08	5.50E-08
7,12-Dimethyl benz(a)anthracene <sup>(3)</sup>					1.12E-07	4.88E-07
Ethylbenzene	0.02	0.07	0.02	0.07	0.23	0.15
PAHs	1.30E-03	5.00E-03	1.30E-03	5.00E-03	0.004	0.01
Propylene Oxide	0.02	0.07	0.02	0.07	0.03	0.13
Arsenic	2.30E-05	3.96E-05	2.30E-05	3.96E-05	4.64E-05	8.13E-05
Beryllium	1.38E-06	2.38E-06	1.38E-06	2.38E-06	2.78E-06	4.88E-06
Cadmium	1.26E-04	2.18E-04	1.26E-04	2.18E-04	2.55E-04	4.47E-04
Chromium	1.61E-04	2.77E-04	1.61E-04	2.77E-04	3.25E-04	5.69E-04
Cobalt	9.64E-06	1.66E-05	9.64E-06	1.66E-05	1.95E-05	3.41E-05
Manganese	4.36E-05	7.53E-05	4.36E-05	7.53E-05	8.81E-05	1.54E-04
Mercury <sup>(2)</sup>					6.04E-07	2.65E-06
Nickel	2.41E-04	4.16E-04	2.41E-04	4.16E-04	4.87E-04	8.54E-04
Selenium	2.75E-06	4.76E-06	2.75E-06	4.76E-06	5.57E-06	9.76E-06
<b>TOTAL</b>	<b>5.33E-01</b>	<b>1.62</b>	<b>0.53</b>	<b>1.62</b>	<b>4.69</b>	<b>3.37</b>

Notes:

(1) Combined cycle units total H

on Catalyst Reduction Control =

(2) Hazardous air pollutant list

(3) HAP because it is Polycyclic

(4) Table 2-1: Stack Exit and Fu

**FIREWATER PUMP ENGINE****Firewater Pump Engine Emission Rates Summary Table**

Unit ID	Air Pollutant	Emission Factor (g/bhp/hr) <sup>(1)</sup>	Emission Factor (lb/bhp/hr) <sup>(2)</sup>	Max. Hourly Emission Rate (lb/hr) <sup>(3)</sup>	Annual Emission Rate (tpy) <sup>(4)</sup>
FP-1	NOx	7.60	0.017	7.42	0.37
	CO	1.48	3.26E-03	1.45	0.07
	VOC	0.26	5.73E-04	0.25	0.01
	SO <sub>2</sub>	0.71	1.57E-03	0.69	0.03
	TSP/PM <sub>10</sub> /PM <sub>2.5</sub>	0.18	3.97E-04	0.18	0.01

**Notes:**

(1) Emission factors per engine manufacturer data Clarke Detroit Diesel-Allison, for a 443 BHP and 2350 RPM.

(2) Emission Factor (lb/bhp/hr) = Emission Factor (g/bhp/hr) \* 1 lb/ 453.59237g

NOx Emission Factor = 7.60 g/bhp/hr \* 1 lb/453.59237g = 0.017 lb/bhp/hr

(3) Max. Hourly Emission Rate (lb/hr) = Emission Factor (lb/bhp/hr) \* Engine Rate (bhp)

Max. Hourly NOx Emission Rate = 0.017 lb/bhp/hr \* 443 bhp = 7.42 lb/hr

(4) Annual Em. Rate (tpy) = Max. Hourly Emission Rate (lb/hr) \* Annual Op. Hours (hr/yr) \* 1ton/2,000lb

Annual NOx Emission Rate = 7.42 lb/hr \* 100 hr/yr \* 1ton/2,000lb = 0.37 tpy

**Firewater Pump GHG Emission Rates Summary Table**

Unit ID	Air Pollutant	Emission Factor (kg/MMBtu) <sup>(1),(2)</sup>	GHG Emission Rate (tpy) <sup>(3)</sup>	Global Warming Potential (100yr.) <sup>(4)</sup>	CO <sub>2</sub> e Emission Rate (tpy) <sup>(5)</sup>
FP-1	CO <sub>2</sub>	73.96	25.28	1	25.28
	CH <sub>4</sub>	3.0E-03	0.001	25	0.03
	N <sub>2</sub> O	6.0E-04	0.0002	298	0.06

Total GHG <sup>(6)</sup> 25.28Total CO<sub>2</sub>e <sup>(7)</sup> 25.37**Notes:**(1) CO<sub>2</sub> emission factors per 40 CFR 98, Subpart C, Table C-1 for Distillate Fuel Oil No. 2(2) CH<sub>4</sub> and N<sub>2</sub>O emission factors per 40 CFR 98, Subpart C, Table C-2 for Petroleum (all fuel types in Table C-1)

(3) GHG Em Rate (tpy) = Em Factor (kg/MMBtu) \* Heat Input (MMBtu/hr) \* Annual Op. Hours (hr/yr) \* 1 metric ton/1,000kg \* 1.1023 short ton/metric ton

CH<sub>4</sub> Emission Rate = 3.0E-03 kg/MMBtu \* 3.10 MMBtu/hr \* 100 hr/yr \* 1 metric ton/1,000kg \* 1.1023 short ton/metric ton = 0.001 tpy

Where 1.1023 short ton/metric ton per 40 CFR 98, Subpart D, §98.43(a)(1)

(4) Global Warming potential per 40 CFR 98, Subpart A, Table A-1

(5) CO<sub>2</sub>e (tpy) = GHG Emission Rate (tpy) \* Global Warming PotentialCH<sub>4</sub> as CO<sub>2</sub>e = 0.001 tpy \* 25 = 0.03 tpy

(6) Total GHG emission rate = Sum of GHG emission rates

Total GHG = 25.28 + 0.001 + 0.0002 = 25.28 tpy

(7) Total CO<sub>2</sub>e emission rate = Sum of CO<sub>2</sub>e emission ratesTotal CO<sub>2</sub>e = 25.28 + 0.03 + 0.06 = 25.37 tpy**Firewater Pump Engine Characteristics <sup>(1)</sup>**

Parameter	Unit	Value
Model	Detroit Diesel DDFP06FA-11V	
Fuel Type	Diesel	
Displacement	6 cylinders	
Engine Rating @ 2100 rpm	bhp	412
Engine Rating @ 2550 rpm	bhp	443
Heat Input <sup>(2)</sup>	MMBtu/hr	3.10
Annual Operating Hours <sup>(3)</sup>	hr/yr	100

**Notes:**

(1) Manufacturer data Clarke Detroit Diesel-Allison

(2) An average brake-specific consumption (BSFC) of 7,000 Btu/bhp/hr was used to convert from bhp to MMBtu/hr per AP42, Footnote "a" of Table 3.3-1.

Heat Input = 443 \* bhp \* 7,000 Btu/bhp/hr \* 1MMBtu/1,000,000 Btu = 3.10 MMBtu/hr

(3) Per §60.4211(f)(2)(i) an emergency engine can operate for up to 100 hr/yr for maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year (accounted to in the 100 hr/yr total).

**FIREWATER PUMP ENGINE****Firewater Pump Engine Speciated HAP Emission Rates Summary Table**

Hazardous Air Pollutants (HAPs)	Emission Factor (lb/MMBtu) <sup>(1)</sup>	Max. Hourly Emission Rate (lb/hr) <sup>(4)</sup>	Annual Emission Rate (tpy) <sup>(5)</sup>
Benzene <sup>(2)</sup>	9.33E-04	2.89E-03	1.45E-04
Toluene <sup>(2)</sup>	4.09E-04	1.27E-03	6.34E-05
Xylenes <sup>(2)</sup>	2.85E-04	8.84E-04	4.42E-05
Propylene	2.58E-03	8.00E-03	4.00E-04
1,3-Butadiene <sup>(2)</sup>	< 3.91E-05	< 1.21E-04	< 6.06E-06
Formaldehyde <sup>(2)</sup>	1.18E-03	3.66E-03	1.83E-04
Acetaldehyde <sup>(2)</sup>	7.67E-04	2.38E-03	1.19E-04
Acrolein <sup>(2)</sup>	< 9.25E-05	< 2.87E-04	< 1.43E-05
Naphthalene <sup>(2),(3)</sup>	8.48E-05	2.63E-04	1.31E-05
Acenaphthylene <sup>(3)</sup>	< 5.06E-06	< 1.57E-05	< 7.85E-07
Acenaphthene <sup>(3)</sup>	< 1.42E-06	< 4.40E-06	< 2.20E-07
Fluorene <sup>(3)</sup>	2.92E-05	9.05E-05	4.53E-06
Phenanthrene <sup>(3)</sup>	2.94E-05	9.12E-05	4.56E-06
Anthracene <sup>(3)</sup>	1.87E-06	5.80E-06	2.90E-07
Fluoranthene <sup>(3)</sup>	7.61E-06	2.36E-05	1.18E-06
Pyrene <sup>(3)</sup>	4.78E-06	1.48E-05	7.41E-07
Benzo(a)anthracene <sup>(3)</sup>	1.68E-06	5.21E-06	2.60E-07
Chrysene <sup>(3)</sup>	3.53E-07	1.09E-06	5.47E-08
Benzo(b)fluoranthene <sup>(3)</sup>	< 9.91E-08	< 3.07E-07	< 1.54E-08
Benzo(k)fluoranthene <sup>(3)</sup>	< 1.55E-07	< 4.81E-07	< 2.40E-08
Benzo(a)pyrene <sup>(3)</sup>	< 1.88E-07	< 5.83E-07	< 2.91E-08
Indeno(1,2,3-cd)pyrene <sup>(3)</sup>	< 3.75E-07	< 1.16E-06	< 5.81E-08
Dibenz(a,h)anthracene <sup>(3)</sup>	< 5.83E-07	< 1.81E-06	< 9.04E-08
Benzo(g,h,i)perylene <sup>(3)</sup>	< 4.89E-07	< 1.52E-06	< 7.58E-08

**Notes:**

(1) Emission factors per US EPA AP-42, Chapter 3.3 (10/96) Table 3.3-2

(2) Hazardous air pollutant listed in the Clean Air Act.

(3) HAP because it is Polycyclic Aromatic Hydrocarbon (PAH).

(4) Max. Hourly Emission Rate (lb/hr) = Emission Factor (lb/MMBtu) \* Heat Input (MMBtu/hr)

Max. Benzene Emission Rate = 9.33E-04 lb/MMBtu \* 3.10 MMBtu/hr = 2.89E-03 lb/hr

(5) Annual Em. Rate (tpy) = Hourly Emission Rate (lb/hr) \* Hours of Op. (hr/yr) \* 1ton/2,000lb

Annual Benzene Emission Rate = 2.89E-03 lb/hr \* 100 hr/yr \* 1ton/2,000lb = 1.45E-04 tpy

**DDFP-06FA**  
**FIRE PUMP DRIVER**  
**EMISSION DATA**

*To complete an application for a Permit to Operate, the following data is provided.*

6 Cylinders  
 Two Cycle  
 Lean Burn  
 Aftercooled  
 Diesel Oil - Fuel  
 No - Energy Recovery from Exhaust  
 No - Emission Control Device

RPM	BHP	FUEL GAL / HR	AIR/FUEL RATIO	GM / BHP / HR					% O <sub>2</sub>	EXHAUST		TIMING DEGREES
				HC	NOx	CO	SO <sub>2</sub>	PART.		'F	CFM	
2350	443	24.9	35.5	0.26	7.60	1.48	0.71	0.18	12.5	820	3275	10.1
2100	412	22.7	35.4	0.22	8.08	1.66	0.70	0.17	12.5	820	2987	10.1
1900	387	20.9	35.5	0.21	8.71	1.83	0.69	0.16	12.5	825	2907	10.1
1760	368	20.0	34.7	0.22	9.13	2.16	0.69	0.16	12.4	830	2594	10.1
1470	315	17.2	33.4	0.23	9.05	4.76	0.69	0.15	12.1	865	2217	10.1

*For specific RPM & BHP ratings, some of the above data may have been extrapolated from the best available test data.*

*Degrees of timing RETARD for 'beginning of injection' based on comparison with pre-emission controlled engines from the same family.*

*Sulfur Dioxide based on 0.2% sulfur content in fuel (by weight).*

8064-7412 Base Model Engine Manufactured by Detroit Diesel Corp.  
 1.23 A/R Turbocharger  
 125MM Fuel Injectors @ 1.490 Timing Height

CDDA OCT 94 JTW



Project Name: TPS McAdams L.L.C.  
 Project #: 0472, Spec. 2384-MS-P480  
 PO #: FR04720014  
 Tag: 0-FP-P-001A, SLS# 219902

**STANDBY DIESEL GENERATOR****Standby Diesel Generator Emission Rates Summary Table**

Unit ID	Air Pollutant	Emission Factor (g/kWh) <sup>(1),(2)</sup>	Emission Factor (lb/kWh) <sup>(3),(4)</sup>	Max. Hourly Emission Rate (lb/hr) <sup>(5)</sup>	Annual Emission Rate (tpy) <sup>(6)</sup>
G-1	NO <sub>x</sub>	5.19	0.01	6.46	1.62
	CO	0.69	1.52E-03	0.86	0.21
	VOC	0.16	3.53E-04	0.20	0.05
	SO <sub>2</sub>	4.05E-04 lb/hp-hr	5.42E-04	0.31	0.08
	TSP/PM <sub>10</sub> /PM <sub>2.5</sub>	0.096	2.12E-04	0.12	0.03

**Notes:**

- (1) NO<sub>x</sub>, CO, VOC and Particulate emission factors per engine manufacturer data Volvo Penta TAD1641GE.  
 (2) SO<sub>2</sub> emission factor per US EPA AP-42 Section 3.4 (10/96) Table 3.4-1 Large Diesel Fired Engines. Sulfur content was assumed to be 0.05% of diesel fuel. The EPA mandate on sulfur content of fuel effective by 2007 is 500 PPM (0.05%).  
 (3) Emission Factor (lb/kWh) = Emission Factor (g/kWh) \* 1 lb/ 453.59237g  
 $\text{NO}_x \text{ Emission Factor} = 5.19 \text{ g/kWh} * 1 \text{ lb}/453.59237\text{g} = 0.01 \text{ lb/kWh}$   
 (4) Ensuuin Factor (lb/kWh) = Emission Factor (lb/hp-hr) \* 1.34 hp/kW  
 $\text{SO}_2 \text{ Emission Factor} = 4.05\text{E-}04 \text{ lb/hp-hr} * 1.34 \text{ hp/kW} = 5.42\text{E-}04 \text{ lb/kWh}$   
 (5) Max. Hourly Emission Rate (lb/hr) = Emission Factor (lb/kWh) \* Engine Rate (kW)  
 $\text{Max. Hourly NO}_x \text{ Emission Rate} = 0.01 \text{ lb/kWh} * 565 \text{ kW} = 6.46 \text{ lb/hr}$   
 (6) Annual Em. Rate (tpy) = Max. Hourly Emission Rate (lb/hr) \* Annual Op. Hours (hr/yr) \* 1ton/2,000lb  
 $\text{Annual NO}_x \text{ Emission Rate} = 6.46 \text{ lb/hr} * 500 \text{ hr/yr} * 1\text{ton}/2,000\text{lb} = 1.62 \text{ tpy}$

**Standby Diesel Generator GHG Emission Rates Summary Table**

Unit ID	Air Pollutant	Emission Factor (kg/MMBtu) <sup>(1),(2)</sup>	GHG Emission Rate (tpy) <sup>(3)</sup>	Global Warming Potential (100yr.) <sup>(4)</sup>	CO <sub>2</sub> e Emission Rate (tpy) <sup>(5)</sup>
G-1	CO <sub>2</sub>	74.0	216.2	1	216.2
	CH <sub>4</sub>	0.003	0.01	25	0.22
	N <sub>2</sub> O	0.001	0.002	298	0.52

Total GHG <sup>(6)</sup>

216.2

Total CO<sub>2</sub>e <sup>(7)</sup>

216.9

**Notes:**

- (1) CO<sub>2</sub> emission factors per 40 CFR 98, Subpart C, Table C-1 for Distillate Fuel Oil No. 2  
 (2) CH<sub>4</sub> and N<sub>2</sub>O emission factors per 40 CFR 98, Subpart C, Table C-2 for Petroleum (all fuel types in Table C-1)  
 (3) GHG Em. Rate (tpy) = Em. Factor (kg/MMBtu) \* Heat Input (MMBtu/hr) \* Annual Op. Hours (hr/yr) \* 1 metric ton/1,000kg \* 1.1023 short ton/metric ton  
 $\text{CH}_4 \text{ Emission Rate} = 0.003 \text{ kg/MMBtu} * 5.30 \text{ MMBtu/hr} * 500 \text{ hr/yr} * 1 \text{ metric ton}/1,000\text{kg} * 1.1023 \text{ short ton}/\text{metric ton} = 0.01 \text{ tpy}$   
 Where 1.1023 short ton/metric ton per 40 CFR 98, Subpart D, §98.43(a)(1)  
 (4) Global Warming potential per 40 CFR 98, Subpart A, Table A-1  
 (5) CO<sub>2</sub>e (tpy) = GHG Emission Rate (tpy) \* Global Warming Potential  
 $\text{CH}_4 \text{ as CO}_2\text{e} = 0.01 \text{ tpy} * 25 = 0.22 \text{ tpy}$   
 (6) Total GHG emission rate = Sum of GHG emission rates  
 $\text{Total GHG} = 216.20 + 0.01 + 0.002 = 216.2 \text{ tpy}$   
 (7) Total CO<sub>2</sub>e emission rate = Sum of CO<sub>2</sub>e emission rates  
 $\text{Total CO}_2\text{e} = 216.20 + 0.22 + 0.52 = 216.9 \text{ tpy}$

**Standby Diesel Generator Characteristics**

Parameter	Unit	Value
Model <sup>(1)</sup>	Volvo Penta TAD1641GE	
Fuel Type <sup>(1)</sup>	Diesel	
Engine Rating @ 1800 rpm <sup>(1)</sup>	kW	565
Engine Rating <sup>(2)</sup>	bhp	758
Heat Input <sup>(3)</sup>	MMBtu/hr	5.30
Annual Operating Hours <sup>(4)</sup>	hr/yr	500

**Notes:**

- (1) Manufacturer data Volvo Penta TAD1641GE.  
 (2) Engine Rating (bhp) = Engine Rating (kW) \* 1.34 hp/kW  
 $\text{Engine Rating} = 565 \text{ kW} * 1.34 \text{ hp/kW} = 758 \text{ bhp}$   
 (3) An average brake-specific consumption (BSFC) of 7,000 Btu/bhp/hr was used to convert from bhp to MMBtu/hr per AP42, Footnote "a" of Table 3.3-1.  
 $\text{Heat Input} = 758 * \text{bhp} * 7,000 \text{ Btu}/\text{bhp}/\text{hr} * 1\text{MMBtu}/1,000,000 \text{ Btu} = 5.30 \text{ MMBtu}/\text{hr}$   
 (4) Per 20.2.72.202.B.3(b) NMAC

**STANDBY DIESEL GENERATOR****Standby Diesel Generator Speciated HAP Emission Rates Summary Table**

Hazardous Air Pollutants (HAPs)	Emission Factor (lb/MMBtu) <sup>(1)</sup>	Max. Hourly Emission Rate (lb/hr) <sup>(4)</sup>	Annual Emission Rate (tpy) <sup>(5)</sup>
Benzene <sup>(2)</sup>	7.76E-04	4.12E-03	1.03E-03
Toluene <sup>(2)</sup>	2.81E-04	1.49E-03	3.73E-04
Xylenes <sup>(2)</sup>	1.93E-04	1.02E-03	2.56E-04
Propylene	2.79E-03	1.48E-02	3.70E-03
Formaldehyde <sup>(2)</sup>	7.89E-05	4.18E-04	1.05E-04
Acetaldehyde <sup>(2)</sup>	2.52E-05	1.34E-04	3.34E-05
Acrolein <sup>(2)</sup>	7.88E-06	4.18E-05	1.04E-05
Naphthalene <sup>(2),(3)</sup>	1.30E-04	6.89E-04	1.72E-04
Acenaphthylene <sup>(3)</sup>	9.23E-06	< 4.90E-05	< 1.22E-05
Acenaphthene <sup>(3)</sup>	4.68E-06	< 2.48E-05	< 6.21E-06
Fluorene <sup>(3)</sup>	1.28E-05	6.79E-05	1.70E-05
Phenanthrene <sup>(3)</sup>	4.08E-05	2.16E-04	5.41E-05
Anthracene <sup>(3)</sup>	1.23E-06	6.52E-06	1.63E-06
Fluoranthene <sup>(3)</sup>	4.03E-06	2.14E-05	5.34E-06
Pyrene <sup>(3)</sup>	3.71E-06	1.97E-05	4.92E-06
Benzo(a)anthracene <sup>(3)</sup>	6.22E-07	3.30E-06	8.25E-07
Chrysene <sup>(3)</sup>	1.53E-06	8.11E-06	2.03E-06
Benzo(b)fluoranthene <sup>(3)</sup>	1.11E-06	< 5.89E-06	< 1.47E-06
Benzo(k)fluoranthene <sup>(3)</sup>	< 2.18E-07	< 1.16E-06	< 2.89E-07
Benzo(a)pyrene <sup>(3)</sup>	< 2.57E-07	< 1.36E-06	< 3.41E-07
Indeno(1,2,3-cd)pyrene <sup>(3)</sup>	< 4.14E-07	< 2.20E-06	< 5.49E-07
Dibenz(a,h)anthracene <sup>(3)</sup>	< 3.46E-07	< 1.84E-06	< 4.59E-07
Benzo(g,h,i)perylene <sup>(3)</sup>	< 5.56E-07	< 2.95E-06	< 7.37E-07
Total PAH	< 2.12E-04	< 1.12E-03	< 2.81E-04

**Notes:**

- (1) Emission factors per US EPA AP-42, Chapter 3.4 (10/96) Tables 3.4-3 and 3.4-4  
 (2) Hazardous air pollutant listed in the Clean Air Act.  
 (3) HAP because it is Polycyclic Aromatic Hydrocarbon (PAH).  
 (4) Max. Hourly Emission Rate (lb/hr) = Emission Factor (lb/MMBtu) \* Heat Input (MMBtu/hr)  
     Max. Benzene Emission Rate = 7.76E-04 lb/MMBtu \* 5.30 MMBtu/hr = 4.12E-03 lb/hr  
 (5) Annual Em. Rate (tpy) = Hourly Emission Rate (lb/hr) \* Hours of Op. (hr/yr) \* 1ton/2,000lb  
     Annual Benzene Emission Rate = 4.12E-03 lb/hr \* 500 hr/yr \* 1ton/2,000lb = 1.03E-03 tpy



NO: 164005-1

**EXHAUST EMISSION DECLARATION**

The emission data in this declaration are measured according to the test procedures specified below and on one member engine of the engine type. Emission data may vary among production engines.

**TECHNICAL SPECIFICATION**

Engine type: TAD1641GE  
 Specification: 869252 / 869253  
 Module No: 138052004  
 Rated crankshaft power \*): 565 kW  
 Rated speed: 1800 rpm  
 \*) The engine performance corresponds to ISO 3046, BS 5514 and DIN 6271.

**TEST INFORMATION**

Test conditions: 40 CFR part 89  
 Test identification: 27001877  
 Test date: May 19, 2004  
 Test cycle: 5-mode US constant speed test cycle

**EXHAUST EMISSIONS (weighted cycle)**

CO (g/kWh)	0,69
HC (g/kWh)	0,16
NOx (g/kWh)	5,19
PM (g/kWh)	0,096

**EXHAUST EMISSIONS (per cycle mode)**

Mode	#	1	2	3	4	5
Power	(kW)	570,1	427,5	285	142,6	57,2
NOx	(g/h)	2957	2165	1481	749	408
HC	(g/h)	35	37	46	46	55
CO	(g/h)	1084	232	84	107	177
PM	(g/h)	80,7	29,5	20,5	18,9	27
CO <sub>2</sub>	(g/h)	395353	284484	189290	104803	57109
NOx	(ppm)	649	547	493	360	247
HC	(ppm)	22	27	45	64	100
CO	(ppm)	366	90	43	79	165
CO <sub>2</sub>	(%)	8,38	6,94	6,07	4,85	3,34
O <sub>2</sub>	(%)	9,19	11,14	12,32	14	16,08

**TA-Luft**

Mode	#	1	2	3	4
Power	(kW)	570,1	427,5	285	142,6
Nox (O <sub>2</sub> )	(g/Nm <sup>3</sup> )	1802	1820	1860	1683
HC (O <sub>2</sub> )	(mg/Nm <sup>3</sup> )	17	25	48	85
CO (O <sub>2</sub> )	(mg/Nm <sup>3</sup> )	620	183	99	225
Soot (O <sub>2</sub> )	(mg/Nm <sup>3</sup> )	27	11	8	13

**SMOKE**

Opacity (%): Acc: n.a., Lug: n.a., Peak: n.a.

Gothenburg 2007-05-14

  
 Hanna Wahlström

AB Volvo Penta  
 47 436, Engine Emission Certification



**FUEL GAS HEATERS****Fuel Gas Heaters Emission Rates Summary Table**

Unit ID	Air Pollutant	Emission Factor <sup>(1),(2)</sup>	Per Heater		3 Heaters Combined	
			Max. Hourly Emission Rate (lb/hr) <sup>(2)</sup>	Annual Emission Rate (tpy) <sup>(3)</sup>	Max. Hourly Emission Rate (lb/hr) <sup>(2)</sup>	Annual Emission Rate (tpy) <sup>(3)</sup>
FH-1, FH-2 and FH-3	NO <sub>x</sub>	0.0090 lb/MMBtu	0.02	0.09	0.07	0.28
	CO	0.0173 lb/MMBtu	0.04	0.18	0.12	0.54
	VOC	5.5 lb/MMscf	0.01	0.06	0.04	0.17
	SO <sub>2</sub>	0.6 lb/MMscf	0.001	0.01	0.004	0.02
	TSP/PM <sub>10</sub> /PM <sub>2.5</sub>	7.6 lb/MMscf	0.02	0.08	0.05	0.23

Notes:

- (1) NO<sub>x</sub>, CO emission factors per engine manufacturer data LAARS Heating Systems Company  
 (2) VOC, SO<sub>2</sub> and Particulate emission factors per US EPA AP-42 Section 1.4 (7/98) Table 1.4-2 Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion  
 (2) Max. Hourly Emission Rate (lb/hr) = Emission Factor (lb/MMBtu) \* Heat Input (MMBtu/hr)  
 Max. Hourly NO<sub>x</sub> Emission Rate (per Heater) = 0.0090 lb/MMBtu \* 2.40 MMBtu/hr = 0.02 lb/hr  
 Max. Hourly NO<sub>x</sub> Emission Rate (3 heaters combined) = 0.02 lb/hr \* 3 heaters = 0.07 lb/hr  
 (3) Annual Em. Rate (tpy) = Max. Hourly Emission Rate (lb/hr) \* Annual Op. Hours (hr/yr) \* 1ton/2,000lb  
 Annual NO<sub>x</sub> Emission Rate = 0.02 lb/hr \* 8,760 hr/yr \* 1ton/2,000lb = 0.09 tpy  
 Annual NO<sub>x</sub> Emission Rate (3 heaters combined) = 0.09 tpy \* 3 heaters = 0.28 tpy

**Fuel Gas Heaters GHG Emission Rates Summary Table (per Heater)**

Unit ID	Air Pollutant	Emission Factor (kg/MMBtu) <sup>(1),(2)</sup>	GHG Emission Rate (tpy) <sup>(3)</sup>	Global Warming Potential (100yr.) <sup>(4)</sup>	CO <sub>2</sub> e Emission Rate (tpy) <sup>(5)</sup>
FH-1, FH-2 and FH-3	CO <sub>2</sub>	53.02	1,229	1	1,229
	CH <sub>4</sub>	1.0E-03	0.02	25	0.58
	N <sub>2</sub> O	1.0E-04	0.002	298	0.69
Total GHG <sup>(6)</sup>					1,229
Total CO <sub>2</sub> e <sup>(7)</sup>					1,230

Notes:

- (1) CO<sub>2</sub> emission factors per 40 CFR 98, Subpart C, Table C-1 for Distillate Fuel Oil No. 2  
 (2) CH<sub>4</sub> and N<sub>2</sub>O emission factors per 40 CFR 98, Subpart C, Table C-2 for Petroleum (all fuel types in Table C-1)  
 (3) GHG Emission Rate (tpy) = Emission Factor (kg/MMBtu) \* Heat Input (MMBtu/hr) \* Annual Op. Hours (hr/yr) \* 1 metric ton/1,000kg \* 1.1023 short ton/metric ton  
 CH<sub>4</sub> Emission Rate = 1.0E-03 kg/MMBtu \* 2.40 MMBtu/hr \* 8,760 hr/yr \* 1 metric ton/1,000kg \* 1.1023 short ton/metric ton = 0.02 tpy  
 Where 1.1023 short ton/metric ton per 40 CFR 98, Subpart D, §98.43(a)(1)  
 (4) Global Warming potential per 40 CFR 98, Subpart A, Table A-1  
 (5) CO<sub>2</sub>e (tpy) = GHG Emission Rate (tpy) \* Global Warming Potential  
 CH<sub>4</sub> as CO<sub>2</sub>e = 0.02 tpy \* 25 = 0.58 tpy  
 (6) Total GHG emission rate = Sum of GHG emission rates  
 Total GHG = 1,229 + 0.02 + 0.002 = 1,229 tpy  
 (7) Total CO<sub>2</sub>e emission rate = Sum of CO<sub>2</sub>e emission rates  
 Total CO<sub>2</sub>e = 1,229 + 0.58 + 0.69 = 1,230 tpy

**Fuel Gas Heaters Characteristics<sup>(1)</sup>**

Parameter	Unit	Value
Fuel Type		Natural Gas
Heat Input (per heater)	MMBtu/hr	2.40
Heat Input (per heater)	MMscf/hr	0.002
Natural Gas Heating Value (HHV) <sup>(2)</sup>	Btu/scf	1,033
Annual Operating Hours	hr/yr	8,760

Notes:

- (1) Manufacturer data  
 (2) Fuel heating value per EMPACT Analytical Systems natural gas analysis conducted on July 9, 2013.

**FUEL GAS HEATERS****Fuel Gas Heaters Speciated HAP Emission Rates Summary Table**

Hazardous Air Pollutants (HAPs)	Emission Factor (lb/MMscf) <sup>(1)</sup>	Emission Factor (lb/MMBtu) <sup>(1)</sup>	Max. Hourly Emission Rate (lb/hr) <sup>(4)</sup>	Annual Emission Rate (tpy) <sup>(5)</sup>
2-Methylnaphthalene <sup>(3)</sup>	2.40E-05	2.32E-08	5.58E-08	2.44E-07
3-Methylchloranthrene <sup>(3)</sup>	< 1.80E-06	< 1.74E-09	4.18E-09	1.83E-08
7,12-Dimethylbenz(a)anthracene <sup>(3)</sup>	< 1.60E-05	< 1.55E-08	3.72E-08	1.63E-07
Acenaphthene <sup>(3)</sup>	< 1.80E-06	< 1.74E-09	4.18E-09	1.83E-08
Acenaphthylene <sup>(3)</sup>	< 1.80E-06	< 1.74E-09	4.18E-09	1.83E-08
Anthracene <sup>(3)</sup>	< 2.40E-06	< 2.32E-09	5.58E-09	2.44E-08
Benzo(a)anthracene <sup>(3)</sup>	< 1.80E-06	< 1.74E-09	4.18E-09	1.83E-08
Benzene <sup>(2)</sup>	2.10E-03	2.03E-06	4.88E-06	2.14E-05
Benzo(a)pyrene <sup>(3)</sup>	< 1.20E-06	< 1.16E-09	2.79E-09	1.22E-08
Benzo(b)fluoranthene <sup>(3)</sup>	< 1.80E-06	< 1.74E-09	4.18E-09	1.83E-08
Benzo(g,h,i)perylene <sup>(3)</sup>	< 1.20E-06	< 1.16E-09	2.79E-09	1.22E-08
Benzo(k)fluoranthene <sup>(3)</sup>	< 1.80E-06	< 1.74E-09	4.18E-09	1.83E-08
Chrysene <sup>(3)</sup>	< 1.80E-06	< 1.74E-09	4.18E-09	1.83E-08
Dibenz(a,h)anthracene <sup>(3)</sup>	< 1.20E-06	< 1.16E-09	2.79E-09	1.22E-08
Dichlorobenzene <sup>(2)</sup>	1.20E-03	1.16E-06	2.79E-06	1.22E-05
Fluoranthene <sup>(3)</sup>	3.00E-06	2.90E-09	6.97E-09	3.05E-08
Fluorene <sup>(3)</sup>	2.80E-06	2.71E-09	6.51E-09	2.85E-08
Formaldehyde <sup>(2)</sup>	7.50E-02	7.26E-05	1.74E-04	7.63E-04
Hexane <sup>(2)</sup>	1.80E+00	1.74E-03	<b>4.18E-03</b>	<b>1.83E-02</b>
Indeno(1,2,3-cd)pyrene <sup>(3)</sup>	< 1.80E-06	< 1.74E-09	4.18E-09	1.83E-08
Naphthalene <sup>(2),(3)</sup>	6.10E-04	5.91E-07	1.42E-06	6.21E-06
Phenanthrene <sup>(3)</sup>	1.70E-05	1.65E-08	3.95E-08	1.73E-07
Pyrene <sup>(3)</sup>	5.00E-06	4.84E-09	1.16E-08	5.09E-08
Toluene <sup>(2)</sup>	3.40E-03	3.29E-06	7.90E-06	3.46E-05
Arsenic <sup>(2)</sup>	2.00E-04	1.94E-07	4.65E-07	2.04E-06
Beryllium <sup>(2)</sup>	< 1.20E-05	< 1.16E-08	< 2.79E-08	< 1.22E-07
Cadmium <sup>(2)</sup>	1.10E-03	1.06E-06	2.56E-06	1.12E-05
Chromium <sup>(2)</sup>	1.40E-03	1.36E-06	3.25E-06	1.42E-05
Cobalt <sup>(2)</sup>	8.40E-05	8.13E-08	1.95E-07	8.55E-07
Manganese <sup>(2)</sup>	3.80E-04	3.68E-07	8.83E-07	3.87E-06
Mercury <sup>(2)</sup>	2.60E-04	2.52E-07	6.04E-07	2.65E-06
Nickel <sup>(2)</sup>	2.10E-03	2.03E-06	4.88E-06	2.14E-05
Selenium <sup>(2)</sup>	< 2.40E-05	< 2.32E-08	< 5.58E-08	< 2.44E-07

**Notes:**

(1) Emission factors per US EPA AP-42 Chapter 1.4 (7/98) Tables 1.4-3 and 1.4-4

(2) Hazardous air pollutant listed in the Clean Air Act.

(3) HAP because it is Polycyclic Aromatic Hydrocarbon (PAH).

(4) Max. Hourly Emission Rate (lb/hr) = Emission Factor (lb/MMBtu) \* Heat Input (MMBtu/hr)

Max. Hexane Emission Rate = 1.74E-03 lb/MMBtu \* 2.40 MMBtu/hr = 4.18E-03 lb/hr

(5) Annual Em. Rate (tpy) = Hourly Emission Rate (lb/hr) \* Hours of Op. (hr/yr) \* 1ton/2,000lb

Annual Hexane Emission Rate = 4.18E-03 lb/hr \* 8,760 hr/yr \* 1ton/2,000lb = 1.83E-02 tpy



20 Industrial Way  
Rochester, NH 03820

January 5, 2007

Scott Nielson  
Boyd Engineering  
206 Conchas S.E.  
Albuquerque NM 87123

Dear Scott,

I have calculated the Rheos models 2400 and 2000 NOx and CO emissions in LBS/hr as requested. The calculations are as follows;

For the Rheos 2400:

**NO<sub>x</sub>**

Enter NOx emissions in ppm, 3% O2 7 ppm

This will result in 0.00903 lbs of NOx per million BTU's consumed

OR

Enter average boiler firing rate	2,400,000 BTU/hr
Enter NOx emissions, 3% O2	7 ppm

This will result in 0.02167 lbs per hour of NOx emissions

## CO

Enter CO emissions in ppm, 3% O2 22 ppm

This will result in 0.01727 lbs of CO per million BTU's consumed

OR

Enter average boiler firing rate	2,400,000 BTU/hr
Enter CO emissions, 3% O2	22 ppm

This will result in 0.04146 lbs per hour of CO emissions

The calculation for a Rheos model 2000 is as follows:

**NOx**

Enter NOx emissions in ppm, 3% O2 7 ppm

This will result in 0.00903 lbs of NOx per million BTU's consumed

**OR**

Enter average boiler firing rate 2,000,000 BTU/hr

Enter NOx emissions, 3% O2 7 ppm

This will result in 0.01806 lbs per hour of NOx emissions

**CO**

Enter CO emissions in ppm, 3% O2 22 ppm

This will result in 0.01727 lbs of CO per million BTU's consumed

**OR**

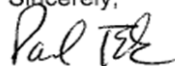
Enter average boiler firing rate 2,000,000 BTU/hr

Enter CO emissions, 3% O2 22 ppm

This will result in 0.03455 lbs per hour of CO emissions

Please let me know if you need any additional information regarding this project.

Sincerely,



Paul Bock  
Applications Engineer

**AUXILIARY COOLING TOWERS****Total Auxiliary Cooling Towers Combined**

Unit ID	Air Pollutant	Max. Hourly Emission Rate (lb/hr) <sup>(1)</sup>	Annual Emission Rate (tpy) <sup>(1)</sup>
AC-1, AC-2 and AC-3	TSP	0.08	0.35
	PM <sub>10</sub>	0.04	0.18
	PM <sub>2.5</sub>	0.0002	0.001

Notes:

(1) Auxiliary Cooling Towers Combined Emission Rate = AC-1 Emission Rate + AC-2 Emission Rate + AC-3 Emission Rate

TSP Auxiliary Cooling Towers Combined Max. Hourly Emission Rate = 0.03 lb/hr + 0.03 lb/hr + 0.03 lb/hr = 0.1 lb/hr

TSP Auxiliary Cooling Towers Combined Annual Emission Rate = 0.12 tpy + 0.12 tpy + 0.12 tpy = 0.35 tpy

**Emission Rates Summary per Unit**

Unit ID	Air Pollutant	Max. Hourly Emission Rate (lb/hr) <sup>(1),(2),(3)</sup>	Annual Emission Rate (tpy) <sup>(4)</sup>
AC-1	TSP	0.03	0.12
	PM <sub>10</sub>	0.01	0.06
	PM <sub>2.5</sub>	0.0001	0.0002
AC-2	TSP	0.03	0.12
	PM <sub>10</sub>	0.01	0.06
	PM <sub>2.5</sub>	0.0001	0.0002
AC-3	TSP	0.03	0.12
	PM <sub>10</sub>	0.01	0.06
	PM <sub>2.5</sub>	0.0001	0.0002

Notes:

(1) TSP Max. Hourly Emission Rate = Flow Rate (gpm) \* 8.34 lb/gal \* 60 min/hr \* Drift Rate Factor (%) \* Water TDS (ppm) / 10<sup>6</sup>

TSP Max. Hourly Emission Rate = 1,780 gal/min \* 8.34 lb/gal \* 60 min/hr \* 0.001/100 \* 3,000 ppm/10<sup>6</sup> = 0.03 lb/hr

(2) PM<sub>10</sub> Max. Hourly Emission Rate = TSP Max. Hourly Emission Rate \* PM<sub>10</sub> Mass% of TSP

PM<sub>10</sub> Max. Hourly Emission Rate = 0.03 lb/hr \* 50/100 = 0.01 lb/hr

(3) PM<sub>2.5</sub> Max. Hourly Emission Rate = TSP Max. Hourly Emission Rate \* PM<sub>2.5</sub> Mass% of TSP

PM<sub>2.5</sub> Max. Hourly Emission Rate = 0.03 lb/hr \* 0.2/100 = 0.0001 lb/hr

(4) Annual Emission Rate = Max. Hourly Emission Rate \* 1 ton/2,000 lb \* 8,760 hr/yr

TSP Annual Emission Rate = 0.03 lb/hr \* 1 ton/2,000 lb \* 8,760 hr/yr = 0.12 tpy

PM<sub>10</sub> Annual Emission Rate = 0.01 lb/hr \* 1 ton/2,000 lb \* 8,760 hr/yr = 0.06 tpy

PM<sub>2.5</sub> Annual Emission Rate = 0.0001 lb/hr \* 1 ton/2,000 lb \* 8,760 hr/yr = 0.0002 tpy

**Auxiliary Wet Surface Cooling Tower Characteristics (per cooling tower) <sup>(1)</sup>**

BAC No.		U014653101-03
Model		FXV3-364-1QQ
# of Cells		1
Temp.	Deg. F	93
Stack Vel.	fps	35.55
Spray Flow Rate	gpm	1,780
Drift Rate Factor	%	0.001
Water TDS	ppm	3,000
Annual Operating Hours	hr/yr	8,760

Notes:

(1) Manufacturer Data

**AUXILIARY COOLING TOWERS****Particle Size Calculation**

Typical Cooling Tower Droplet Size <sup>(1)</sup>		Calculated Particle Size, Dp (microns) <sup>(2)</sup>
Mean, Dd (microns)	Distribution (% Mass Smaller than)	
10	-	1.109
20	0.196	2.218
30	0.226	3.327
40	0.514	4.436
50	1.816	5.545
60	5.702	6.654
70	21.348	7.762
90	49.812	9.980
110	70.509	12.198
130	82.023	14.416
150	88.012	16.634
180	91.032	19.961
210	92.468	23.287
240	94.091	26.614
270	94.689	29.941
300	96.288	33.268
350	97.011	38.812
400	98.340	44.357
450	99.071	49.901
500	99.071	55.446
600	100.000	66.535

Parameter	Particle Size (microns)	Mass % <sup>(3)</sup>
% Mass Drift	10	50
% Mass Drift	2.5	0.2

**Notes:**

(1) Typical cooling tower droplet size as published by Joel Reisman and Gordon Frisbie

Calculating Realistic PM<sub>10</sub> Emissions from Cooling Towers.

[http://www.energy.ca.gov/sitingcases/palomar/documents/applicants\\_files/Data\\_Request\\_Response/Air%20Quality/Attachment%204-1.pdf](http://www.energy.ca.gov/sitingcases/palomar/documents/applicants_files/Data_Request_Response/Air%20Quality/Attachment%204-1.pdf)

(2)  $D_p \text{ (microns)} = D_d \text{ (microns)} * ((\rho_d/\rho_p) * TDS / 1,000,000)^{(1/3)}$

Water density,  $\rho_d$  1 g/cm<sup>3</sup>

Density of TDS,  $\rho_p$  2.2 g/cm<sup>3</sup> (surrogated to Sodium Chloride density)

$D_p \text{ (Maximum Case 10 microns)} = 10 * ((1 / 2.2) * 3,000 / 1,000,000)^{(1/3)} = 1.109 \text{ microns}$

(3) Linear Interpolation is used to calculate the % of PM emissions equal to or less than PM<sub>10</sub> and PM<sub>2.5</sub>.

**INLET CHILLERS****Total Inlet Chillers Combined**

Unit ID	Air Pollutant	Max. Hourly Emission Rate (lb/hr) <sup>(1)</sup>	Annual Emission Rate (tpy) <sup>(1)</sup>
IC-1, IC-2 and IC-3	TSP	0.70	2.12
	PM <sub>10</sub>	0.35	1.06
	PM <sub>2.5</sub>	0.001	0.004

Notes:

- (1) Inlet Chillers Combined Emission Rate = IC-1 Emission Rate + IC-2 Emission Rate + IC-3 Emission Rate  
 TSP Inlet Chillers Combined Max. Hourly Emission Rate = 0.23 lb/hr + 0.23 lb/hr + 0.23 lb/hr = 0.70 lb/hr  
 TSP Inlet Chillers Combined Annual Emission Rate = 0.71 tpy + 0.71 tpy + 0.71 tpy = 2.12 tpy

**Emission Rates Summary per Unit**

Unit ID	Air Pollutant	Max. Hourly Emission Rate (lb/hr) <sup>(1),(2),(3)</sup>	Annual Emission Rate (tpy) <sup>(4),(5),(6)</sup>
IC-1	TSP	0.23	0.71
	PM <sub>10</sub>	0.12	0.35
	PM <sub>2.5</sub>	0.0005	0.001
IC-2	TSP	0.23	0.71
	PM <sub>10</sub>	0.12	0.35
	PM <sub>2.5</sub>	0.0005	0.001
IC-3	TSP	0.23	0.71
	PM <sub>10</sub>	0.12	0.35
	PM <sub>2.5</sub>	0.0005	0.001

Notes:

- (1) TSP Max. Hourly Emission Rate = Max. Flow Rate (gpm) \* 8.34 lb/gal \* 60 min/hr \* Drift Rate Factor (%) \* Water TDS (ppm) / 10<sup>6</sup>  
 TSP Max. Hourly Emission Rate = 15,448 gal/min \* 8.34 lb/gal \* 60 min/hr \* 0.001/100 \* 3,000 ppm/10<sup>6</sup> = 0.23 lb/hr  
 (2) PM<sub>10</sub> Max. Hourly Emission Rate = TSP Max. Hourly Emission Rate \* PM<sub>10</sub> Mass% of TSP  
 PM<sub>10</sub> Max. Hourly Emission Rate = 0.23 lb/hr \* 50/100 = 0.12 lb/hr  
 (3) PM<sub>2.5</sub> Max. Hourly Emission Rate = TSP Max. Hourly Emission Rate \* PM<sub>2.5</sub> Mass% of TSP  
 PM<sub>2.5</sub> Max. Hourly Emission Rate = 0.23 lb/hr \* 0.2/100 = 0.0005 lb/hr  
 (4) TSP Annual Emission Rate = Design Flow Rate (gpm) \* 8.34 lb/gal \* 60 min/hr \* Drift Rate Factor (%) \* Water TDS (ppm) / 10<sup>6</sup>  
 TSP Annual Emission Rate = 11,796 gal/min \* 8.34 lb/gal \* 60 min/hr \* 0.001/100 \* 3,000 ppm/10<sup>6</sup> \* 1 ton/2,000 lb \* 8,000 hr/yr = 0.71 tpy  
 (5) PM<sub>10</sub> Annual Emission Rate = TSP Annual Emission Rate \* PM<sub>10</sub> Mass% of TSP  
 PM<sub>10</sub> Annual Emission Rate = 0.71 tpy \* 50/100 = 0.35 tpy  
 (6) PM<sub>2.5</sub> Annual Emission Rate = TSP Annual Emission Rate \* PM<sub>2.5</sub> Mass% of TSP  
 PM<sub>2.5</sub> Annual Emission Rate = 0.71 tpy \* 0.2/100 = 0.001 tpy

**Inlet Chiller Characteristics (per chiller) <sup>(1)</sup>**

BAC No.		U014283401-03
Model		331132A-RM-V-4
# of Cells		4
Temp.	Deg. F	93
Stack Vel.	fps	35.5
Maximum Flow Rate	gpm	15,448
Design Flow Rate	gpm	11,796
Drift Rate Factor	%	0.001
Water TDS	ppm	3,000
PM <sub>10</sub> (% of TSP)	%	50
Annual Operating Hours <sup>(2)</sup>	hr/yr	8,000

Notes:

- (1) Manufacturer Data  
 (2) Inlet chillers are not operated in cold weather

**INLET CHILLERS****Particle Size Calculation**

Typical Cooling Tower Droplet Size <sup>(1)</sup>		Calculated Particle Size, Dp (microns) <sup>(2)</sup>
Mean, Dd (microns)	Distribution (% Mass Smaller than)	
10	-	1.109
20	0.196	2.218
30	0.226	3.327
40	0.514	4.436
50	1.816	5.545
60	5.702	6.654
70	21.348	7.762
90	49.812	9.980
110	70.509	12.198
130	82.023	14.416
150	88.012	16.634
180	91.032	19.961
210	92.468	23.287
240	94.091	26.614
270	94.689	29.941
300	96.288	33.268
350	97.011	38.812
400	98.340	44.357
450	99.071	49.901
500	99.071	55.446
600	100.000	66.535

Parameter	Particle Size (microns)	Mass % <sup>(3)</sup>
% Mass Drift	10	50
% Mass Drift	2.5	0.2

**Notes:**

(1) Typical cooling tower droplet size as published by Joel Reisman and Gordon Frisbie

Calculating Realistic PM<sub>10</sub> Emissions from Cooling Towers.

[http://www.energy.ca.gov/sitingcases/palomar/documents/applicants\\_files/Data\\_Request\\_Response/Air%20Quality/Attachment%204-1.pdf](http://www.energy.ca.gov/sitingcases/palomar/documents/applicants_files/Data_Request_Response/Air%20Quality/Attachment%204-1.pdf)

(2)  $D_p \text{ (microns)} = D_d \text{ (microns)} * ((\rho_d/\rho_p) * TDS / 1,000,000))^{(1/3)}$

Water density,  $\rho_d$  1 g/cm<sup>3</sup>

Density of TDS,  $\rho_p$  2.2 g/cm<sup>3</sup> (surrogated to Sodium Chloride density)

$D_p \text{ (Maximum Case 10 microns)} = 10 * ((1 / 2.2) * 3,000 / 1,000,000)^{(1/3)} = 1.109 \text{ microns}$

(3) Linear Interpolation is used to calculate the % of PM emissions equal to or less than PM<sub>10</sub> and PM<sub>2.5</sub>.



**DIESEL AND GASOLINE TANKS****Diesel and Gasoline Tanks Emission Rates Summary Table**

Unit ID	Air Pollutant	Max. Hourly Emission Rate (lb/hr) <sup>(1)</sup>	Annual Emission Rate (tpy) <sup>(2)</sup>
T-7	VOC	0.01	0.0001
T-8	VOC	0.05	0.00004
T-9	VOC	4.89	0.09

**Notes**

(1) Max. Hourly Emission Rate (lb/hr) = Max. Working Loss (lb/month) \* 12 month/yr \* Max. Filling Rate (gal/hr) / (Turnover (1/yr) \* Tank Capacity (gal))

Max. Hourly Emission Rate T-9 =  $3.31 \text{ lb/month} * 12 \text{ month/yr} * 480.00 \text{ gal/hr} / (9 / \text{yr} * 450 \text{ gal}) = 4.89 \text{ lb/hr}$

(2) Annual emission Rate (tpy) = (Work Losses (lb/yr) + Standing Losses (lb/yr)) \* 1 ton/2,000 lb

Annual Emission Rate T-9 =  $(33.47 \text{ lb/yr} + 149.67 \text{ lb/yr}) * 1 \text{ ton} / 2,000 \text{ lb} = 0.09 \text{ tpy}$

**Tanks General Information <sup>(1)</sup>**

Unit ID	T-7	T-8 <sup>(2)</sup>	T-9
Tank Description	Diesel Tank	Diesel Tank	Gasoline Tank
Modeled Material	Distillate Fuel Oil No. 2	Distillate Fuel Oil No. 2	Distillate fuel oil no. 2
Tank Type	Horizontal	Horizontal	Horizontal
Length (ft)	5.00	3.75	5.00
Diameter (ft)	4.17	2.00	4.17
Tank Capacity (gal)	500	100	500
Working Volume (gal)	450	75	450
Maximum Filling Rate (gal/hr)	480	480	480
Throughput (gal/yr)	2,000	500	3,900
Turnover per year	4	2	9
Maximum Working Loss (lb/month)	0.0049	0.0012	3.31
Working Loss (lb/yr)	0.04	0.01	33.47
Standing Losses (lb/yr)	0.13	0.06	149.67

**Notes**

(1) The emission rates are calculated using AP-42 TANKS 4.09D software and assume the tanks maintain a constant liquid level.

(2) AP-42 Tanks 4.09D can only run tanks with a minimum of 3ft length x 5ft diameter (264 gal tank). Emission rates for T-8 are estimated based on a larger tank as a conservative approach.

**Diesel Tanks Speciated HAP Emission Rates Summary Table (per Tank)**

Components <sup>(1)</sup>	Avg. Composition <sup>(2)</sup>	Max. Percentage	Max. Hourly Emission Rate (lb/hr) <sup>(3)</sup>	Annual Emission Rate (tpy) <sup>(4)</sup>
Cumene	0-1	1%	0.0001	0.000001
Ethylbenzene	0-1	1%	0.0005	0.0000004
Naphthalene	0-2	2%	0.10	0.002

**Notes**

(1) Hazardous air pollutant listed in the Clean Air Act per product MSDS

**Gasoline Tank Speciated HAP Emission Rates Summary Table**

Components <sup>(1)</sup>	Avg. Composition <sup>(2)</sup>	Max. Percentage	Max. Hourly Emission Rate (lb/hr) <sup>(3)</sup>	Annual Emission Rate (tpy) <sup>(4)</sup>
Methyl Tert-Butyl Ether (MTBE)	0-15%	15%	0.73	0.01
Toluene	1-20%	20%	0.98	0.02
Xilenes, all isomers	0-10%	10%	0.49	0.01
n-Hexane	1-8%	8%	0.39	0.01
Benzene	0-4.9%	4.9%	0.240	0.004
Cumene	0.5-4%	4%	0.196	0.004
Ethylbenzene	0.2-4%	4%	0.196	0.004
Naphthalene	0.1-2%	2%	0.098	0.002
Styrene	0-1%	1%	0.049	0.001

**Notes**

(1) Hazardous air pollutant listed in the Clean Air Act per product MSDS

## US EPA Tanks 4.09d Run

ID	MIX ID	PRIMARY	NAME	MONTH	TANK_TYPE	USER ID	CITY	STATE	COMPANY	DESC	MET CTYST	AMB_T
18	1	TRUE	Distillate fuel oil no. 2	January	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	38.75
18	1	TRUE	Distillate fuel oil no. 2	February	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	43.1
18	1	TRUE	Distillate fuel oil no. 2	March	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	51.2
18	1	TRUE	Distillate fuel oil no. 2	April	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	61.05
18	1	TRUE	Distillate fuel oil no. 2	May	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	69.45
18	1	TRUE	Distillate fuel oil no. 2	June	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	77.15
18	1	TRUE	Distillate fuel oil no. 2	July	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	79.95
18	1	TRUE	Distillate fuel oil no. 2	August	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	77.9
18	1	TRUE	Distillate fuel oil no. 2	September	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	71.15
18	1	TRUE	Distillate fuel oil no. 2	October	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	61.4
18	1	TRUE	Distillate fuel oil no. 2	November	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	49.85
18	1	TRUE	Distillate fuel oil no. 2	December	Horizontal Tank	T-7	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	40.65
19	1	TRUE	Distillate fuel oil no. 2	January	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	38.75
19	1	TRUE	Distillate fuel oil no. 2	February	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	43.1
19	1	TRUE	Distillate fuel oil no. 2	March	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	51.2
19	1	TRUE	Distillate fuel oil no. 2	April	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	61.05
19	1	TRUE	Distillate fuel oil no. 2	May	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	69.45
19	1	TRUE	Distillate fuel oil no. 2	June	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	77.15
19	1	TRUE	Distillate fuel oil no. 2	July	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	79.95
19	1	TRUE	Distillate fuel oil no. 2	August	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	77.9
19	1	TRUE	Distillate fuel oil no. 2	September	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	71.15
19	1	TRUE	Distillate fuel oil no. 2	October	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	61.4
19	1	TRUE	Distillate fuel oil no. 2	November	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	49.85
19	1	TRUE	Distillate fuel oil no. 2	December	Horizontal Tank	T-8	Hobbs	New Mexico	Lea Power Partners	Diesel Tank	Lubbock, Texas	40.65
20	1	TRUE	Gasoline (RVP 10)	January	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	38.75
20	1	TRUE	Gasoline (RVP 10)	February	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	43.1
20	1	TRUE	Gasoline (RVP 10)	March	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	51.2
20	1	TRUE	Gasoline (RVP 10)	April	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	61.05
20	1	TRUE	Gasoline (RVP 10)	May	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	69.45
20	1	TRUE	Gasoline (RVP 10)	June	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	77.15
20	1	TRUE	Gasoline (RVP 10)	July	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	79.95
20	1	TRUE	Gasoline (RVP 10)	August	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	77.9
20	1	TRUE	Gasoline (RVP 10)	September	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	71.15
20	1	TRUE	Gasoline (RVP 10)	October	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	61.4
20	1	TRUE	Gasoline (RVP 10)	November	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	49.85
20	1	TRUE	Gasoline (RVP 10)	December	Horizontal Tank	T-9	Hobbs	New Mexico	Lea Power Partners	Gasoline Tank	Lubbock, Texas	40.65

T_MIN	T_MAX	INSOL	P_A	S_LOSS	W_LOSS	MOLWT	VP_MOLWT	ALPHA	ALS_TEMP	MLS_TEMP	XLS_TEMP	BULK_T	A_VP	M_VP
24.6	52.9	975.29	13.11	0.0070	0.0025	188	130	0.17	511.72	505.46	517.97	519.82	0.005	0.004
28.6	57.6	1251.95	13.11	0.0074	0.0028	188	130	0.17	514.00	507.29	520.71	519.82	0.01	0.00
36.4	66	1610.78	13.11	0.0100	0.0032	188	130	0.17	518.05	510.80	525.29	519.82	0.01	0.00
46.7	75.4	1969.61	13.11	0.0117	0.0038	188	130	0.17	522.86	515.35	530.37	519.82	0.01	0.01
55.8	83.1	2132.69	13.11	0.0134	0.0043	188	130	0.17	526.78	519.33	534.23	519.82	0.01	0.01
64.3	90	2247.86	13.11	0.0139	0.0047	188	130	0.17	530.32	523.02	537.62	519.82	0.01	0.01
68	91.9	2205.34	13.11	0.0140	0.0049	188	130	0.17	531.50	524.57	538.42	519.82	0.01	0.01
66.2	89.6	2009.59	13.11	0.0129	0.0047	188	130	0.17	530.33	523.73	536.93	519.82	0.01	0.01
59.4	82.9	1661.54	13.11	0.0107	0.0043	188	130	0.17	526.89	520.69	533.10	519.82	0.01	0.01
48.1	74.7	1407.41	13.11	0.0101	0.0037	188	130	0.17	522.26	515.80	528.72	519.82	0.01	0.01
36.5	63.2	1055.56	13.11	0.0077	0.0030	188	130	0.17	516.71	510.65	522.77	519.82	0.01	0.00
27.2	54.1	890.89	13.11	0.0067	0.0026	188	130	0.17	512.44	506.54	518.34	519.82	0.01	0.00
24.6	52.9	975.29	13.11	0.0036	0.0006	188	130	0.17	511.72	505.46	517.97	519.82	0.00	0.00
28.6	57.6	1251.95	13.11	0.0038	0.0007	188	130	0.17	514.00	507.29	520.71	519.82	0.01	0.00
36.4	66	1610.78	13.11	0.0052	0.0008	188	130	0.17	518.05	510.80	525.29	519.82	0.01	0.00
46.7	75.4	1969.61	13.11	0.0061	0.0009	188	130	0.17	522.86	515.35	530.37	519.82	0.01	0.01
55.8	83.1	2132.69	13.11	0.0069	0.0011	188	130	0.17	526.78	519.33	534.23	519.82	0.01	0.01
64.3	90	2247.86	13.11	0.0072	0.0012	188	130	0.17	530.32	523.02	537.62	519.82	0.01	0.01
68	91.9	2205.34	13.11	0.0073	0.0012	188	130	0.17	531.50	524.57	538.42	519.82	0.01	0.01
66.2	89.6	2009.59	13.11	0.0067	0.0012	188	130	0.17	530.33	523.73	536.93	519.82	0.01	0.01
59.4	82.9	1661.54	13.11	0.0055	0.0011	188	130	0.17	526.89	520.69	533.10	519.82	0.01	0.01
48.1	74.7	1407.41	13.11	0.0052	0.0009	188	130	0.17	522.26	515.80	528.72	519.82	0.01	0.01
36.5	63.2	1055.56	13.11	0.0040	0.0008	188	130	0.17	516.71	510.65	522.77	519.82	0.01	0.00
27.2	54.1	890.89	13.11	0.0035	0.0007	188	130	0.17	512.44	506.54	518.34	519.82	0.01	0.00
24.6	52.9	975.29	13.11	8.20	2.26	92	66	0.17	511.72	505.46	517.97	519.82	4.43	3.91
28.6	57.6	1251.95	13.11	8.54	2.37	92	66	0.17	514.00	507.29	520.71	519.82	4.64	4.06
36.4	66	1610.78	13.11	11.61	2.57	92	66	0.17	518.05	510.80	525.29	519.82	5.02	4.35
46.7	75.4	1969.61	13.11	13.61	2.82	92	66	0.17	522.86	515.35	530.37	519.82	5.51	4.77
55.8	83.1	2132.69	13.11	15.91	3.03	92	66	0.17	526.78	519.33	534.23	519.82	5.94	5.15
64.3	90	2247.86	13.11	17.05	3.24	92	66	0.17	530.32	523.02	537.62	519.82	6.35	5.53
68	91.9	2205.34	13.11	17.41	3.31	92	66	0.17	531.50	524.57	538.42	519.82	6.49	5.70
66.2	89.6	2009.59	13.11	15.89	3.24	92	66	0.17	530.33	523.73	536.93	519.82	6.35	5.61
59.4	82.9	1661.54	13.11	12.79	3.04	92	66	0.17	526.89	520.69	533.10	519.82	5.95	5.29
48.1	74.7	1407.41	13.11	11.81	2.78	92	66	0.17	522.26	515.80	528.72	519.82	5.45	4.81
36.5	63.2	1055.56	13.11	8.95	2.50	92	66	0.17	516.71	510.65	522.77	519.82	4.89	4.34
27.2	54.1	890.89	13.11	7.89	2.30	92	66	0.17	512.44	506.54	518.34	519.82	4.50	3.99

X_VP	DIAMETER	EFF_DIAM	HEIGHT_S	VOLUME	Q_NET	TURNOVER	SHL COLSHD	PT_COND	VP_RANGE	T_RANGE	VT_RANGE	VS_OUT	VS_VOL	V_DENS
0.006	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.002	28.30	25.02	2.09	43.49	0.00012
0.007	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.003	29.00	26.84	2.09	43.49	0.00013
0.008	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.003	29.60	28.98	2.09	43.49	0.00014
0.009	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.004	28.70	30.04	2.09	43.49	0.00017
0.010	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.004	27.30	29.81	2.09	43.49	0.00019
0.011	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.004	25.70	29.20	2.09	43.49	0.00021
0.012	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.004	23.90	27.71	2.09	43.49	0.00022
0.011	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.004	23.40	26.41	2.09	43.49	0.00021
0.010	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.003	23.50	24.83	2.09	43.49	0.00019
0.009	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.003	26.60	25.85	2.09	43.49	0.00017
0.007	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.003	26.70	24.25	2.09	43.49	0.00014
0.006	4.17	5.15	5	450	166.67	4.44	White/White	Good	0.002	26.90	23.61	2.09	43.49	0.00012
0.006	3	4.37	5	210	41.67	2.38	White/White	Good	0.002	28.30	25.02	1.50	22.51	0.00012
0.007	3	4.37	5	210	41.67	2.38	White/White	Good	0.003	29.00	26.84	1.50	22.51	0.00013
0.008	3	4.37	5	210	41.67	2.38	White/White	Good	0.003	29.60	28.98	1.50	22.51	0.00014
0.009	3	4.37	5	210	41.67	2.38	White/White	Good	0.004	28.70	30.04	1.50	22.51	0.00017
0.010	3	4.37	5	210	41.67	2.38	White/White	Good	0.004	27.30	29.81	1.50	22.51	0.00019
0.011	3	4.37	5	210	41.67	2.38	White/White	Good	0.004	25.70	29.20	1.50	22.51	0.00021
0.012	3	4.37	5	210	41.67	2.38	White/White	Good	0.004	23.90	27.71	1.50	22.51	0.00022
0.011	3	4.37	5	210	41.67	2.38	White/White	Good	0.004	23.40	26.41	1.50	22.51	0.00021
0.010	3	4.37	5	210	41.67	2.38	White/White	Good	0.003	23.50	24.83	1.50	22.51	0.00019
0.009	3	4.37	5	210	41.67	2.38	White/White	Good	0.003	26.60	25.85	1.50	22.51	0.00017
0.007	3	4.37	5	210	41.67	2.38	White/White	Good	0.003	26.70	24.25	1.50	22.51	0.00014
0.006	3	4.37	5	210	41.67	2.38	White/White	Good	0.002	26.90	23.61	1.50	22.51	0.00012
5.017	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.111	28.30	25.02	2.09	43.49	0.05329
5.291	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.236	29.00	26.84	2.09	43.49	0.05552
5.776	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.423	29.60	28.98	2.09	43.49	0.05965
6.355	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.589	28.70	30.04	2.09	43.49	0.06487
6.825	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.674	27.30	29.81	2.09	43.49	0.06937
7.260	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.729	25.70	29.20	2.09	43.49	0.07363
7.366	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.669	23.90	27.71	2.09	43.49	0.07509
7.170	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.564	23.40	26.41	2.09	43.49	0.07365
6.685	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.396	23.50	24.83	2.09	43.49	0.06950
6.163	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.355	26.60	25.85	2.09	43.49	0.06420
5.505	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.165	26.70	24.25	2.09	43.49	0.05826
5.053	4.17	5.15	5	450	325.00	8.67	White/White	Good	1.060	26.90	23.61	2.09	43.49	0.05399

BV_RANGE	K_E	K_S	K_N	K_P	M_KR	M_P	M_KC	M_C	VENT_P	VENT_V
0.06	0.044	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.048	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.052	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.053	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.052	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.051	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.048	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.046	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.043	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.045	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.043	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.042	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.044	1.000	1	1	0	0	0	0	0.03	-0.03
0.06	0.048	1.000	1	1	0	0	0	0	0.03	-0.03
0.06	0.052	1.000	1	1	0	0	0	0	0.03	-0.03
0.06	0.053	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.052	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.051	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.048	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.046	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.043	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.045	0.999	1	1	0	0	0	0	0.03	-0.03
0.06	0.043	1.000	1	1	0	0	0	0	0.03	-0.03
0.06	0.042	1.000	1	1	0	0	0	0	0.03	-0.03
0.06	0.170	0.671	1	1	0	0	0	0	0.03	-0.03
0.06	0.191	0.661	1	1	0	0	0	0	0.03	-0.03
0.06	0.225	0.643	1	1	0	0	0	0	0.03	-0.03
0.06	0.259	0.621	1	1	0	0	0	0	0.03	-0.03
0.06	0.282	0.604	1	1	0	0	0	0	0.03	-0.03
0.06	0.302	0.588	1	1	0	0	0	0	0.03	-0.03
0.06	0.295	0.582	1	1	0	0	0	0	0.03	-0.03
0.06	0.272	0.588	1	1	0	0	0	0	0.03	-0.03
0.06	0.234	0.603	1	1	0	0	0	0	0.03	-0.03
0.06	0.219	0.624	1	1	0	0	0	0	0.03	-0.03
0.06	0.182	0.649	1	1	0	0	0	0	0.03	-0.03
0.06	0.162	0.668	1	1	0	0	0	0	0.03	-0.03

# Section 7

## Information Used To Determine Emissions

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**Information Used to Determine Emissions shall include the following:**

- ☒ If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
  - ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
  - ☒ If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
  - ☐ If an older version of AP-42 is used, include a complete copy of the section.
  - ☐ If an EPA document or other material is referenced, include a complete copy.
  - ☒ Fuel specifications sheet.
  - ☐ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.
- 

The following information was used to calculate the emission rates for the firewater pump, the standby generator, the auxiliary cooling towers, the inlet chillers and the gasoline and diesel storage tanks. All vendor documentation is included in the following pages. The detailed emission rate calculations are provided in **Section 6** and the **UA2 Form**. The information is as follows:

- Vendor emission factors as provided by Clarke Detroit Diesel-Alisson for the firewater pump.
- Vendor emission factors as provided by Volvo Penta TAD1641GE for the standby generator.
- Vendor specifications for the inlet chillers (BAC No. U014283401-03) and for the auxiliary cooling towers (U014653101-03).
- U.S. EPA AP 42 Tanks 4.09D Run Report

**Vendor Information for the Firewater Pump (Unit FP-1)****DDFP-06FA**

FIRE PUMP DRIVER

**EMISSION DATA**

*To complete an application for a Permit to Operate, the following data is provided.*

6 Cylinders  
Two Cycle  
Lean Burn  
Aftercooled  
Diesel Oil - Fuel  
No - Energy Recovery from Exhaust  
No - Emission Control Device

RPM	BHP	FUEL GAL / HR	AIR/FUEL RATIO	GM / BHP / HR					% O <sub>2</sub>	EXHAUST		TIMING DEGREES
				HC	NOx	CO	SO <sub>2</sub>	PART.		°F	CFM	
2350	443	24.9	35.5	0.26	7.60	1.48	0.71	0.18	12.5	820	3275	10.1
2100	412	22.7	35.4	0.22	8.08	1.66	0.70	0.17	12.5	820	2987	10.1
1900	387	20.9	35.5	0.21	8.71	1.83	0.69	0.16	12.5	825	2907	10.1
1760	368	20.0	34.7	0.22	9.13	2.16	0.69	0.16	12.4	830	2594	10.1
1470	315	17.2	33.4	0.23	9.05	4.76	0.69	0.15	12.1	865	2217	10.1

*For specific RPM & BHP ratings, some of the above data may have been extrapolated from the best available test data.*

*Degrees of timing RETARD for 'beginning of injection' based on comparison with pre-emission controlled engines from the same family.*

*Sulfur Dioxide based on 0.2% sulfur content in fuel (by weight).*

8064-7412 Base Model Engine Manufactured by Detroit Diesel Corp.  
1.23 A/R Turbocharger  
125MM Fuel Injectors @ 1.490 Timing Height

CDDA OCT 94 JTW



Project Name: TPS McAdams L.L.C.  
Project #: 0472, Spec. 2384-MS-P480  
PO #: FR04720014  
Tag: 0-FP-P-001A, SLS# 219902

**Vendor Information for the Standby Diesel Generator (Unit G-1)****VOLVO  
PENTA**

NO: 164005-1

**EXHAUST EMISSION DECLARATION**

The emission data in this declaration are measured according to the test procedures specified below and on one member engine of the engine type. Emission data may vary among production engines.

**TECHNICAL SPECIFICATION**

Engine type: TAD1641GE  
 Specification: 869252 / 869253  
 Module No: 138052004  
 Rated crankshaft power \*): 565 kW  
 Rated speed: 1800 rpm  
 \*) The engine performance corresponds to ISO 3046, BS 5514 and DIN 6271.

**TEST INFORMATION**

Test conditions: 40 CFR part 89  
 Test identification: 27001877  
 Test date: May 19, 2004  
 Test cycle: 5-mode US constant speed test cycle

**EXHAUST EMISSIONS (weighted cycle)**

CO (g/kWh)	0,69
HC (g/kWh)	0,16
NOx (g/kWh)	5,19
PM (g/kWh)	0,096

**EXHAUST EMISSIONS (per cycle mode)**

Mode	#	1	2	3	4	5
Power	(kW)	570,1	427,5	285	142,6	57,2
NOx	(g/h)	2957	2165	1481	749	408
HC	(g/h)	35	37	46	46	55
CO	(g/h)	1084	232	84	107	177
PM	(g/h)	80,7	29,5	20,5	18,9	27
CO <sub>2</sub>	(g/h)	395353	284484	189290	104803	57109
NOx	(ppm)	649	547	493	360	247
HC	(ppm)	22	27	45	64	100
CO	(ppm)	366	90	43	79	165
CO <sub>2</sub>	(%)	8,38	6,94	6,07	4,85	3,34
O <sub>2</sub>	(%)	9,19	11,14	12,32	14	16,08

**TA-Luft**

Mode	#	1	2	3	4
Power	(kW)	570,1	427,5	285	142,6
Nox (O <sub>2</sub> )	(g/Nm <sup>3</sup> )	1802	1820	1860	1683
HC (O <sub>2</sub> )	(mg/Nm <sup>3</sup> )	17	25	48	85
CO (O <sub>2</sub> )	(mg/Nm <sup>3</sup> )	620	183	99	225
Soot (O <sub>2</sub> )	(mg/Nm <sup>3</sup> )	27	11	8	13

**SMOKE**

Opacity (%): Acc: n.a., Lug: n.a., Peak: n.a.

Gothenburg 2007-05-14



Hanna Wahlström

AB Volvo Penta  
 47 436, Engine Emission Certification



**Vendor Information for the Inlet Chillers (IC-1, IC-2 and IC-3) and the  
Auxiliary Cooling Towers (Units AC-1, AC-2, and AC-3)**

**From:** Garrett VanGosen [<mailto:gvangosen@baltimoreaircoil.com>]  
**Sent:** Wednesday, March 18, 2015 1:15 PM  
**To:** Michael Barnett  
**Subject:** Re: FW: Need Your Info

Mike,

Below please find an information breakdown for each cooling tower. If there is any other information needed or something isn't clear please let me know.

- BAC No. U014653101-03
  - This order consists of three (3) model FXV3-364-1QQ closed circuit cooling towers
  - The design flow rate for each unit is 3600 gpm of 44.7% propylene glycol
    - Each unit has two (2) coils so that flow rate can be split in half to determine the flow rate per coil.
  - The minimum flow per unit is 600 gpm
  - The maximum flow per unit is 5,840 gpm
  - Each unit has two (2) pumps which provide a total spray flow of 1,780 gpm
  - The drift rate is 0.001% of the spray flow (1,780 gpm)
- BAC No. U014283401-03
  - This order consists of three (3) model 331132A-RM-V-4 open cooling towers
    - Each one of these towers is actually four (4) cells. The following flow rates will be per each cell (12 cells total)
  - The design flow rate for each cell is 2,949 gpm of water (11,796 per each 4-cell unit)
  - The minimum flow rate through the towers is approximately 1,820 gpm per cell
  - The maximum flow rate through the towers is approximately 3,862 gpm per cell
  - Because these units have the optional second set of drift eliminators, the drift rate is 0.001% of the circulating water rate

Please let us know if there are any other questions.

Best regards,

Garrett VanGosen  
Baltimore Aircoil Company  
Direct: 410-799-6460

*BAC will be closed on Friday, April 3, 2015 in observance of Good Friday. Normal operations will resume on Monday, April 6, 2015*

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification:	T-7
City:	Hobbs
State:	New Mexico
Company:	Lea Power Partners
Type of Tank:	Horizontal Tank
Description:	Diesel Tank

**Tank Dimensions**

Shell Length (ft):	5.00
Diameter (ft):	4.17
Volume (gallons):	450.00
Turnovers:	4.44
Net Throughput(gal/yr):	2,000.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

**Paint Characteristics**

Shell Color/Shade:	White/White
Shell Condition	Good

**Breather Vent Settings**

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meterological Data used in Emissions Calculations: Lubbock, Texas (Avg Atmospheric Pressure = 13.11 psia)

# **TANKS 4.0.9d** **Emissions Report - Detail Format** **Liquid Contents of Storage Tank**

## **T-7 - Horizontal Tank** **Hobbs, New Mexico**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Distillate fuel oil no. 2	Jan	52.05	45.79	58.30	60.15	0.0049	0.0039	0.0062	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065
Distillate fuel oil no. 2	Feb	54.33	47.62	61.04	60.15	0.0054	0.0042	0.0068	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065
Distillate fuel oil no. 2	Mar	58.38	51.13	65.62	60.15	0.0062	0.0047	0.0079	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065
Distillate fuel oil no. 2	Apr	63.19	55.68	70.70	60.15	0.0073	0.0056	0.0092	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	May	67.11	59.66	74.56	60.15	0.0083	0.0064	0.0104	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Jun	70.65	63.35	77.95	60.15	0.0092	0.0073	0.0114	130.0000			188.00	Option 1: VP70 = .009 VP80 = .012
Distillate fuel oil no. 2	Jul	71.83	64.90	78.75	60.15	0.0095	0.0077	0.0116	130.0000			188.00	Option 1: VP70 = .009 VP80 = .012
Distillate fuel oil no. 2	Aug	70.66	64.06	77.26	60.15	0.0092	0.0075	0.0112	130.0000			188.00	Option 1: VP70 = .009 VP80 = .012
Distillate fuel oil no. 2	Sep	67.22	61.02	73.43	60.15	0.0083	0.0068	0.0100	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Oct	62.59	56.13	69.05	60.15	0.0071	0.0057	0.0088	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Nov	57.04	50.98	63.10	60.15	0.0059	0.0047	0.0073	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065
Distillate fuel oil no. 2	Dec	52.77	46.87	58.67	60.15	0.0051	0.0041	0.0062	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065

## TANKS 4.0.9d

### Emissions Report - Detail Format

### Detail Calculations (AP-42)

#### T-7 - Horizontal Tank Hobbs, New Mexico

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0070	0.0074	0.0100	0.0117	0.0134	0.0139	0.0140	0.0129	0.0107	0.0101	0.0077	0.0067
Vapor Space Volume (cu ft):	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943
Vapor Density (lb/cu ft):	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001
Vapor Space Expansion Factor:	0.0445	0.0478	0.0516	0.0531	0.0523	0.0508	0.0478	0.0455	0.0428	0.0452	0.0425	0.0417
Vented Vapor Saturation Factor:	0.9995	0.9994	0.9993	0.9992	0.9991	0.9990	0.9989	0.9990	0.9991	0.9992	0.9993	0.9994
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943
Tank Diameter (ft):	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700
Effective Diameter (ft):	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537
Vapor Space Outage (ft):	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850
Tank Shell Length (ft):	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
Vapor Density												
Vapor Density (lb/cu ft):	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001
Vapor Molecular Weight (lb/lb-mole):	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0049	0.0054	0.0062	0.0073	0.0083	0.0092	0.0095	0.0092	0.0083	0.0071	0.0059	0.0051
Daily Avg. Liquid Surface Temp. (deg. R):	511.7157	514.0012	518.0471	522.8631	526.7781	530.3207	531.4956	530.3307	526.8933	522.2620	516.7075	512.4383
Daily Average Ambient Temp. (deg. F):	38.7500	43.1000	51.2000	61.0500	69.4500	77.1500	79.9500	77.9000	71.1500	61.4000	49.8500	40.6500
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	975.2880	1,251.9474	1,610.7798	1,969.6122	2,132.6889	2,247.8580	2,205.3438	2,009.5882	1,661.5430	1,407.4097	1,055.5573	890.8942
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0445	0.0478	0.0516	0.0531	0.0523	0.0508	0.0478	0.0455	0.0428	0.0452	0.0425	0.0417
Daily Vapor Temperature Range (deg. R):	25.0184	26.8393	28.9793	30.0394	29.8076	29.2038	27.7054	26.4136	24.8289	25.8513	24.2485	23.6087
Daily Vapor Pressure Range (psia):	0.0022	0.0026	0.0032	0.0036	0.0039	0.0040	0.0039	0.0037	0.0033	0.0030	0.0026	0.0022
Breather Vent Press. Setting Range(psia):	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0049	0.0054	0.0062	0.0073	0.0083	0.0092	0.0095	0.0092	0.0083	0.0071	0.0059	0.0051
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0039	0.0042	0.0047	0.0056	0.0064	0.0073	0.0077	0.0075	0.0068	0.0057	0.0047	0.0041
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0062	0.0068	0.0079	0.0092	0.0104	0.0114	0.0116	0.0112	0.0100	0.0088	0.0073	0.0062
Daily Avg. Liquid Surface Temp. (deg R):	511.7157	514.0012	518.0471	522.8631	526.7781	530.3207	531.4956	530.3307	526.8933	522.2620	516.7075	512.4383
Daily Min. Liquid Surface Temp. (deg R):	505.4611	507.2914	510.8023	515.3532	519.3262	523.0198	524.5693	523.7273	520.6861	515.7992	510.6454	506.5362
Daily Max. Liquid Surface Temp. (deg R):	517.9703	520.7110	525.2920	530.3729	534.2300	537.6217	538.4220	536.9342	533.1006	528.7248	522.7696	518.3405
Daily Ambient Temp. Range (deg. R):	28.3000	29.0000	29.6000	28.7000	27.3000	25.7000	23.9000	23.4000	23.5000	26.6000	26.7000	26.9000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9995	0.9994	0.9993	0.9992	0.9991	0.9990	0.9989	0.9990	0.9991	0.9992	0.9993	0.9994
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0049	0.0054	0.0062	0.0073	0.0083	0.0092	0.0095	0.0092	0.0083	0.0071	0.0059	0.0051
Vapor Space Outage (ft):	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850
Working Losses (lb):	0.0025	0.0028	0.0032	0.0038	0.0043	0.0047	0.0049	0.0047	0.0043	0.0037	0.0030	0.0026
Vapor Molecular Weight (lb/lb-mole):	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0049	0.0054	0.0062	0.0073	0.0083	0.0092	0.0095	0.0092	0.0083	0.0071	0.0059	0.0051
Net Throughput (gal/mo.):	166.6667	166.6667	166.6667	166.6667	166.6667	166.6667	166.6667	166.6667	166.6667	166.6667	166.6667	166.6667
Annual Turnovers:	4.4444	4.4444	4.4444	4.4444	4.4444	4.4444	4.4444	4.4444	4.4444	4.4444	4.4444	4.4444
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Tank Diameter (ft):	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	0.0095	0.0101	0.0132	0.0155	0.0177	0.0187	0.0189	0.0176	0.0149	0.0138	0.0107	0.0093

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**T-7 - Horizontal Tank**  
**Hobbs, New Mexico**

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.04	0.13	0.17

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification:	T-8
City:	Hobbs
State:	New Mexico
Company:	Lea Power Partners
Type of Tank:	Horizontal Tank
Description:	Diesel Tank

**Tank Dimensions**

Shell Length (ft):	5.00
Diameter (ft):	3.00
Volume (gallons):	210.00
Turnovers:	2.38
Net Throughput(gal/yr):	500.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

**Paint Characteristics**

Shell Color/Shade:	White/White
Shell Condition	Good

**Breather Vent Settings**

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lubbock, Texas (Avg Atmospheric Pressure = 13.11 psia)

# **TANKS 4.0.9d** **Emissions Report - Detail Format** **Liquid Contents of Storage Tank**

## **T-8 - Horizontal Tank** **Hobbs, New Mexico**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Distillate fuel oil no. 2	Jan	52.05	45.79	58.30	60.15	0.0049	0.0039	0.0062	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065
Distillate fuel oil no. 2	Feb	54.33	47.62	61.04	60.15	0.0054	0.0042	0.0068	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065
Distillate fuel oil no. 2	Mar	58.38	51.13	65.62	60.15	0.0062	0.0047	0.0079	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065
Distillate fuel oil no. 2	Apr	63.19	55.68	70.70	60.15	0.0073	0.0056	0.0092	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	May	67.11	59.66	74.56	60.15	0.0083	0.0064	0.0104	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Jun	70.65	63.35	77.95	60.15	0.0092	0.0073	0.0114	130.0000			188.00	Option 1: VP70 = .009 VP80 = .012
Distillate fuel oil no. 2	Jul	71.83	64.90	78.75	60.15	0.0095	0.0077	0.0116	130.0000			188.00	Option 1: VP70 = .009 VP80 = .012
Distillate fuel oil no. 2	Aug	70.66	64.06	77.26	60.15	0.0092	0.0075	0.0112	130.0000			188.00	Option 1: VP70 = .009 VP80 = .012
Distillate fuel oil no. 2	Sep	67.22	61.02	73.43	60.15	0.0083	0.0068	0.0100	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Oct	62.59	56.13	69.05	60.15	0.0071	0.0057	0.0088	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Nov	57.04	50.98	63.10	60.15	0.0059	0.0047	0.0073	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065
Distillate fuel oil no. 2	Dec	52.77	46.87	58.67	60.15	0.0051	0.0041	0.0062	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065



## TANKS 4.0.9d

### Emissions Report - Detail Format

### Detail Calculations (AP-42)

#### T-8 - Horizontal Tank Hobbs, New Mexico

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0036	0.0038	0.0052	0.0061	0.0069	0.0072	0.0073	0.0067	0.0055	0.0052	0.0040	0.0035
Vapor Space Volume (cu ft):	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114
Vapor Density (lb/cu ft):	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001
Vapor Space Expansion Factor:	0.0445	0.0478	0.0516	0.0531	0.0523	0.0508	0.0478	0.0455	0.0428	0.0452	0.0425	0.0417
Vented Vapor Saturation Factor:	0.9996	0.9996	0.9995	0.9994	0.9993	0.9993	0.9992	0.9993	0.9993	0.9994	0.9995	0.9996
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114	22.5114
Tank Diameter (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Effective Diameter (ft):	4.3713	4.3713	4.3713	4.3713	4.3713	4.3713	4.3713	4.3713	4.3713	4.3713	4.3713	4.3713
Vapor Space Outage (ft):	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
Tank Shell Length (ft):	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
Vapor Density												
Vapor Density (lb/cu ft):	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001
Vapor Molecular Weight (lb/lb-mole):	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0049	0.0054	0.0062	0.0073	0.0083	0.0092	0.0095	0.0092	0.0083	0.0071	0.0059	0.0051
Daily Avg. Liquid Surface Temp. (deg. R):	511.7157	514.0012	518.0471	522.8631	526.7781	530.3207	531.4956	530.3307	526.8933	522.2620	516.7075	512.4383
Daily Average Ambient Temp. (deg. F):	38.7500	43.1000	51.2000	61.0500	69.4500	77.1500	79.9500	77.9000	71.1500	61.4000	49.8500	40.6500
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	975.2880	1,251.9474	1,610.7798	1,969.6122	2,132.6889	2,247.8580	2,205.3438	2,009.5882	1,661.5430	1,407.4097	1,055.5573	890.8942
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0445	0.0478	0.0516	0.0531	0.0523	0.0508	0.0478	0.0455	0.0428	0.0452	0.0425	0.0417
Daily Vapor Temperature Range (deg. R):	25.0184	26.8393	28.9793	30.0394	29.8076	29.2038	27.7054	26.4136	24.8289	25.8513	24.2485	23.6087
Daily Vapor Pressure Range (psia):	0.0022	0.0026	0.0032	0.0036	0.0039	0.0040	0.0039	0.0037	0.0033	0.0030	0.0026	0.0022
Breather Vent Press. Setting Range(psia):	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0049	0.0054	0.0062	0.0073	0.0083	0.0092	0.0095	0.0092	0.0083	0.0071	0.0059	0.0051
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0039	0.0042	0.0047	0.0056	0.0064	0.0073	0.0077	0.0075	0.0068	0.0057	0.0047	0.0041
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0062	0.0068	0.0079	0.0092	0.0104	0.0114	0.0116	0.0112	0.0100	0.0088	0.0073	0.0062
Daily Avg. Liquid Surface Temp. (deg R):	511.7157	514.0012	518.0471	522.8631	526.7781	530.3207	531.4956	530.3307	526.8933	522.2620	516.7075	512.4383
Daily Min. Liquid Surface Temp. (deg R):	505.4611	507.2914	510.8023	515.3532	519.3262	523.0198	524.5693	523.7273	520.6861	515.7992	510.6454	506.5362
Daily Max. Liquid Surface Temp. (deg R):	517.9703	520.7110	525.2920	530.3729	534.2300	537.6217	538.4220	536.9342	533.1006	528.7248	522.7696	518.3405
Daily Ambient Temp. Range (deg. R):	28.3000	29.0000	29.6000	28.7000	27.3000	25.7000	23.9000	23.4000	23.5000	26.6000	26.7000	26.9000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9996	0.9996	0.9995	0.9994	0.9993	0.9993	0.9992	0.9993	0.9993	0.9994	0.9995	0.9996
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0049	0.0054	0.0062	0.0073	0.0083	0.0092	0.0095	0.0092	0.0083	0.0071	0.0059	0.0051
Vapor Space Outage (ft):	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
Working Losses (lb):	0.0006	0.0007	0.0008	0.0009	0.0011	0.0012	0.0012	0.0012	0.0011	0.0009	0.0008	0.0007
Vapor Molecular Weight (lb/lb-mole):	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0049	0.0054	0.0062	0.0073	0.0083	0.0092	0.0095	0.0092	0.0083	0.0071	0.0059	0.0051
Net Throughput (gal/mo.):	41.6667	41.6667	41.6667	41.6667	41.6667	41.6667	41.6667	41.6667	41.6667	41.6667	41.6667	41.6667
Annual Turnovers:	2.3810	2.3810	2.3810	2.3810	2.3810	2.3810	2.3810	2.3810	2.3810	2.3810	2.3810	2.3810
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Tank Diameter (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	0.0042	0.0045	0.0060	0.0070	0.0080	0.0084	0.0085	0.0079	0.0066	0.0061	0.0047	0.0041

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**T-8 - Horizontal Tank**  
**Hobbs, New Mexico**

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.01	0.06	0.08

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification:	T-9
City:	Hobbs
State:	New Mexico
Company:	Lea Power Partners
Type of Tank:	Horizontal Tank
Description:	Gasoline Tank

**Tank Dimensions**

Shell Length (ft):	5.00
Diameter (ft):	4.17
Volume (gallons):	450.00
Turnovers:	8.67
Net Throughput(gal/yr):	3,900.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

**Paint Characteristics**

Shell Color/Shade:	White/White
Shell Condition	Good

**Breather Vent Settings**

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lubbock, Texas (Avg Atmospheric Pressure = 13.11 psia)

## TANKS 4.0.9d

### Emissions Report - Detail Format

### Liquid Contents of Storage Tank

#### T-9 - Horizontal Tank Hobbs, New Mexico

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 10)	Jan	52.05	45.79	58.30	60.15	4.4338	3.9064	5.0170	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	Feb	54.33	47.62	61.04	60.15	4.6402	4.0552	5.2913	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	Mar	58.38	51.13	65.62	60.15	5.0246	4.3534	5.7763	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	Apr	63.19	55.68	70.70	60.15	5.5149	4.7659	6.3553	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	May	67.11	59.66	74.56	60.15	5.9411	5.1512	6.8249	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	Jun	70.65	63.35	77.95	60.15	6.3491	5.5315	7.2603	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	Jul	71.83	64.90	78.75	60.15	6.4892	5.6975	7.3662	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	Aug	70.66	64.06	77.26	60.15	6.3503	5.6068	7.1703	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	Sep	67.22	61.02	73.43	60.15	5.9541	5.2887	6.6846	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	Oct	62.59	56.13	69.05	60.15	5.4517	4.8080	6.1626	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	Nov	57.04	50.98	63.10	60.15	4.8946	4.3397	5.5050	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
Gasoline (RVP 10)	Dec	52.77	46.87	58.67	60.15	4.4982	3.9932	5.0534	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3

## TANKS 4.0.9d

### Emissions Report - Detail Format

### Detail Calculations (AP-42)

#### T-9 - Horizontal Tank Hobbs, New Mexico

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	8.1990	8.5423	11.6131	13.6148	15.9071	17.0510	17.4052	15.8887	12.7918	11.8086	8.9549	7.8888
Vapor Space Volume (cu ft):	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943
Vapor Density (lb/cu ft):	0.0533	0.0555	0.0597	0.0649	0.0694	0.0736	0.0751	0.0736	0.0695	0.0642	0.0583	0.0540
Vapor Space Expansion Factor:	0.1700	0.1911	0.2246	0.2589	0.2817	0.3020	0.2952	0.2723	0.2339	0.2186	0.1815	0.1622
Vented Vapor Saturation Factor:	0.6712	0.6610	0.6430	0.6213	0.6037	0.5877	0.5824	0.5876	0.6032	0.6240	0.6490	0.6680
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943	43.4943
Tank Diameter (ft):	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700
Effective Diameter (ft):	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537	5.1537
Vapor Space Outage (ft):	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850
Tank Shell Length (ft):	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
Vapor Density												
Vapor Density (lb/cu ft):	0.0533	0.0555	0.0597	0.0649	0.0694	0.0736	0.0751	0.0736	0.0695	0.0642	0.0583	0.0540
Vapor Molecular Weight (lb/lb-mole):	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	4.4338	4.6402	5.0246	5.5149	5.9411	6.3491	6.4892	6.3503	5.9541	5.4517	4.8946	4.4982
Daily Avg. Liquid Surface Temp. (deg. R):	511.7157	514.0012	518.0471	522.8631	526.7781	530.3207	531.4956	530.3307	526.8933	522.2620	516.7075	512.4383
Daily Average Ambient Temp. (deg. F):	38.7500	43.1000	51.2000	61.0500	69.4500	77.1500	79.9500	77.9000	71.1500	61.4000	49.8500	40.6500
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233	519.8233
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	975.2880	1,251.9474	1,610.7798	1,969.6122	2,132.6889	2,247.8580	2,205.3438	2,009.5882	1,661.5430	1,407.4097	1,055.5573	890.8942
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.1700	0.1911	0.2246	0.2589	0.2817	0.3020	0.2952	0.2723	0.2339	0.2186	0.1815	0.1622
Daily Vapor Temperature Range (deg. R):	25.0184	26.8393	28.9793	30.0394	29.8076	29.2038	27.7054	26.4136	24.8289	25.8513	24.2485	23.6087
Daily Vapor Pressure Range (psia):	1.1107	1.2361	1.4230	1.5893	1.6737	1.7288	1.6687	1.5635	1.3959	1.3546	1.1654	1.0602
Breather Vent Press. Setting Range(psia):	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	4.4338	4.6402	5.0246	5.5149	5.9411	6.3491	6.4892	6.3503	5.9541	5.4517	4.8946	4.4982
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	3.9064	4.0552	4.3534	4.7659	5.1512	5.5315	5.6975	5.6068	5.2887	4.8080	4.3397	3.9932
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	5.0170	5.2913	5.7763	6.3553	6.8249	7.2603	7.3662	7.1703	6.6846	6.1626	5.5050	5.0534
Daily Avg. Liquid Surface Temp. (deg R):	511.7157	514.0012	518.0471	522.8631	526.7781	530.3207	531.4956	530.3307	526.8933	522.2620	516.7075	512.4383
Daily Min. Liquid Surface Temp. (deg R):	505.4611	507.2914	510.8023	515.3532	519.3262	523.0198	524.5693	523.7273	520.6861	515.7992	510.6454	506.5362
Daily Max. Liquid Surface Temp. (deg R):	517.9703	520.7110	525.2920	530.3729	534.2300	537.6217	538.4220	536.9342	533.1006	528.7248	522.7696	518.3405
Daily Ambient Temp. Range (deg. R):	28.3000	29.0000	29.6000	28.7000	27.3000	25.7000	23.9000	23.4000	23.5000	26.6000	26.7000	26.9000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.6712	0.6610	0.6430	0.6213	0.6037	0.5877	0.5824	0.5876	0.6032	0.6240	0.6490	0.6680
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	4.4338	4.6402	5.0246	5.5149	5.9411	6.3491	6.4892	6.3503	5.9541	5.4517	4.8946	4.4982
Vapor Space Outage (ft):	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850	2.0850
Working Losses (lb):	2.2644	2.3698	2.5661	2.8165	3.0342	3.2426	3.3141	3.2432	3.0408	2.7843	2.4997	2.2973
Vapor Molecular Weight (lb/lb-mole):	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	4.4338	4.6402	5.0246	5.5149	5.9411	6.3491	6.4892	6.3503	5.9541	5.4517	4.8946	4.4982
Net Throughput (gal/mo.):	325.0000	325.0000	325.0000	325.0000	325.0000	325.0000	325.0000	325.0000	325.0000	325.0000	325.0000	325.0000
Annual Turnovers:	8.6667	8.6667	8.6667	8.6667	8.6667	8.6667	8.6667	8.6667	8.6667	8.6667	8.6667	8.6667
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Tank Diameter (ft):	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	10.4634	10.9122	14.1792	16.4313	18.9413	20.2936	20.7194	19.1319	15.8326	14.5929	11.4546	10.1861

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**T-9 - Horizontal Tank**  
**Hobbs, New Mexico**

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Gasoline (RVP 10)	33.47	149.67	183.14



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Total Emissions Summaries - All Tanks in Report**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

Tank Identification				Losses (lbs)
T-7	Lea Power Partners	Horizontal Tank	Hobbs, New Mexico	0.17
T-8	Lea Power Partners	Horizontal Tank	Hobbs, New Mexico	0.08
T-9	Lea Power Partners	Horizontal Tank	Hobbs, New Mexico	183.14
Total Emissions for all Tanks:				183.38

# Section 8

## Map(s)

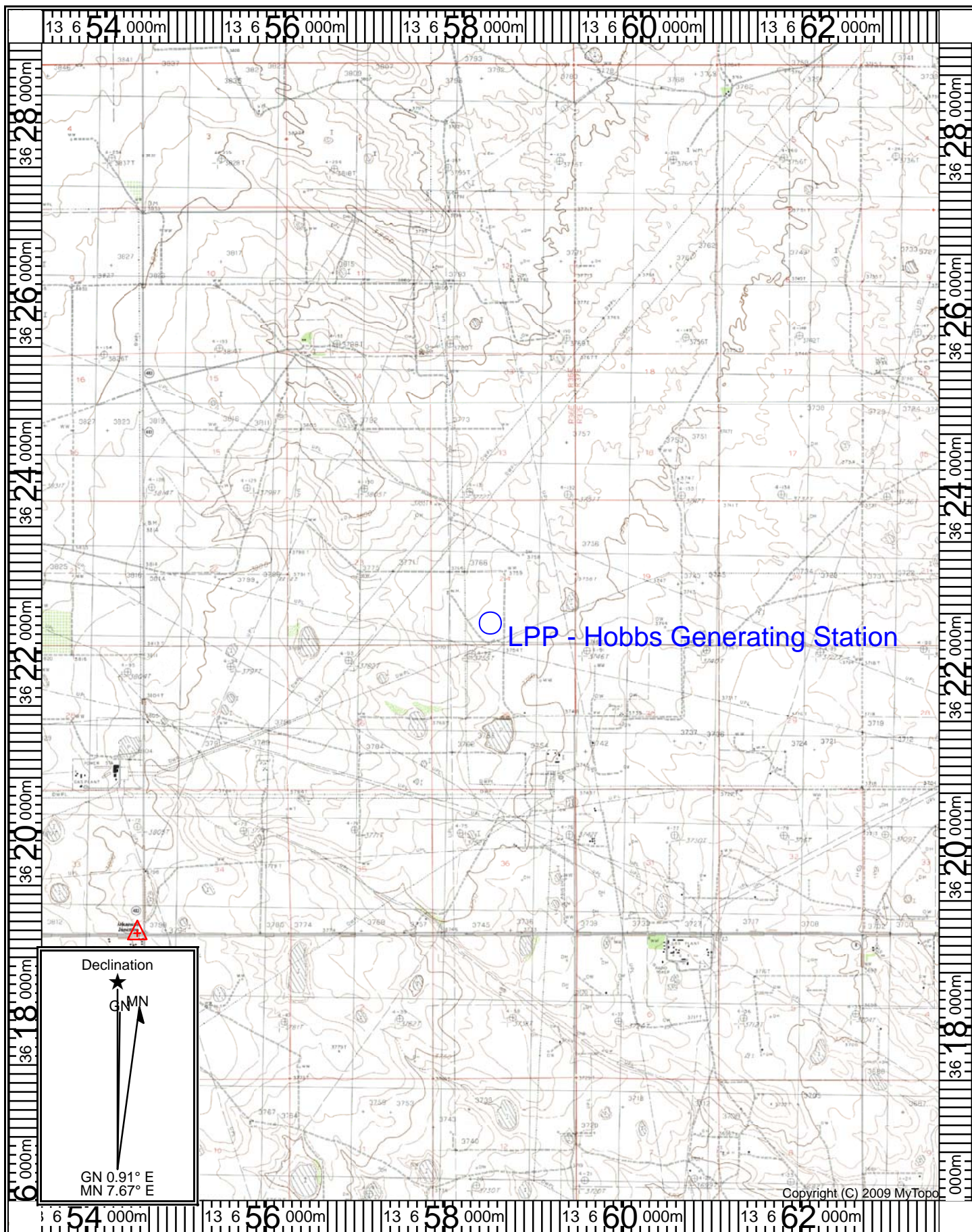
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**A map** such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	

---

An area map of the facility is attached.



Map Name: MONUMENT NORTH  
Print Date: 03/06/12

Scale: 1 inch = 4,761 ft.  
Map Center: 13 0658413 E 3622424 N

Horizontal Datum: WGS84

# Section 9

## Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

(This proof is required by: 20.2.72.203.A.14 NMAC “Documentary Proof of applicant’s public notice”)

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☒ **I have read the AQB “Guidelines for Public Notification for Air Quality Permit Applications”**

This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

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Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant’s Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

**New Permit** and **Significant Permit Revision** public notices must include all items in this list.

**Technical Revision** public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

1. ☒ A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
  2. ☒ A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
  3. ☒ A copy of the property tax record (20.2.72.203.B NMAC).
  4. ☒ A sample of the letters sent to the owners of record.
  5. ☒ A sample of the letters sent to counties, municipalities, and Indian tribes.
  6. ☒ A sample of the public notice posted and a verification of the local postings.
  7. ☒ A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
  8. ☒ A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
  9. ☒ A copy of the classified or legal ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
  10. ☒ A copy of the display ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
  11. ☒ A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.
- 

Proof of public notice is included in the following pages.



## Delivery Confirmations of Certified Letters

**Sandra Nichols**

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**Subject:** FW: USPS Shipment Info for 70123050000133024942

**From:** [US Postal Service@usps.com](mailto:US_Postal_Service@usps.com) [[mailto:US\\_Postal\\_Service@usps.com](mailto:US_Postal_Service@usps.com)]

**Sent:** Tuesday, March 31, 2015 3:17 PM

**To:** Sandra Nichols

**Subject:** USPS Shipment Info for 70123050000133024942

This is a post-only message. Please do not respond.

Sandra Nichols has requested that you receive a USPS Tracking™ update, as shown below.

USPS Tracking™ e-mail update information provided by the U.S. Postal Service.

Label Number: [70123050000133024942](#) **CARLIN PROPERTIES**

Updated Delivery Date: March 30, 2015

Service Type: Certified Mail™

Shipment Activity	Location	Date & Time
Delivered	MONUMENT, NM 88265	March 31, 2015 12:23 pm
Available for Pickup	MONUMENT, NM 88265	March 28, 2015 10:42 am
Arrived at Unit	MONUMENT, NM 88265	March 28, 2015 10:42 am
Departed USPS Facility	LUBBOCK, TX 79402	March 27, 2015 11:41 pm
Arrived at USPS Origin Facility	LUBBOCK, TX 79402	March 27, 2015 6:53 am
Departed USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 11:42 pm
Arrived at USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 11:06 pm
Departed Post Office	HOUSTON, TX 77058	March 25, 2015 6:17 pm
Acceptance	HOUSTON, TX 77058	March 25, 2015 4:20 pm

Reminder: USPS Tracking™ by email

Date of email request: March 27, 2015

Future activity will continue to be emailed for up to 2 weeks from the Date of Request shown above. If you need to initiate the USPS Tracking™ by email process again at the end of the 2 weeks, please do so at the USPS Tracking™ web site at <http://www.usps.com/shipping/trackandconfirm.htm>

Results provided by the U.S. Postal Service.

Want to Track on the go?

You can track your packages using USPS Text Tracking™ by texting your tracking number to 28777 (2USPS™) or selecting the Text Update option on our USPS Tracking™ site.

For more information go to <https://www.usps.com/text-tracking/welcome.htm>

**Sandra Nichols**

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**Subject:** FW: USPS Shipment Info for 70123050000133025000

**From:** [US Postal Service@usps.com](mailto:US_Postal_Service@usps.com) [mailto:[US\\_Postal\\_Service@usps.com](mailto:US_Postal_Service@usps.com)]

**Sent:** Monday, March 30, 2015 11:21 AM

**To:** Sandra Nichols

**Subject:** USPS Shipment Info for 70123050000133025000

This is a post-only message. Please do not respond.

Sandra Nichols has requested that you receive a USPS Tracking™ update, as shown below.

USPS Tracking™ e-mail update information provided by the U.S. Postal Service.

Label Number: [70123050000133025000](#) **CITY OF HOBBS**

Service Type: Certified Mail™

Shipment Activity	Location	Date & Time
Delivered	HOBBS, NM 88240	March 30, 2015 9:53 am
Departed USPS Facility	LUBBOCK, TX 79402	March 27, 2015 11:41 pm
Arrived at USPS Origin Facility	LUBBOCK, TX 79402	March 27, 2015 6:54 am
Departed USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 11:09 pm
Arrived at USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 10:11 pm
Departed Post Office	HOUSTON, TX 77058	March 25, 2015 6:17 pm
Acceptance	HOUSTON, TX 77058	March 25, 2015 4:20 pm

Reminder: USPS Tracking™ by email

Date of email request: March 27, 2015

Future activity will continue to be emailed for up to 2 weeks from the Date of Request shown above. If you need to initiate the USPS Tracking™ by email process again at the end of the 2 weeks, please do so at the USPS Tracking™ web site at <http://www.usps.com/shipping/trackandconfirm.htm>

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For more information go to <https://www.usps.com/text-tracking/welcome.htm>

**Sandra Nichols**

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**Subject:** FW: USPS Shipment Info for 70123050000133024966

**From:** [US Postal Service@usps.com](mailto:US_Postal_Service@usps.com) [[mailto:US\\_Postal\\_Service@usps.com](mailto:US_Postal_Service@usps.com)]

**Sent:** Monday, March 30, 2015 9:51 AM

**To:** Sandra Nichols

**Subject:** USPS Shipment Info for 70123050000133024966

This is a post-only message. Please do not respond.

Sandra Nichols has requested that you receive a USPS Tracking™ update, as shown below.

USPS Tracking™ e-mail update information provided by the U.S. Postal Service.

Label Number: [70123050000133024966](#) **EL PASO NATURAL GAS**

On Time

Expected Delivery Date: March 30, 2015

Service Type: Certified Mail™

Shipment Activity	Location	Date & Time
Delivered	HOUSTON, TX 77210	March 30, 2015 5:42 am
Arrived at Unit	HOUSTON, TX 77201	March 30, 2015 5:42 am
Arrived at USPS Origin Facility	HOUSTON, TX 77201	March 27, 2015 4:35 am
Departed USPS Origin Facility	NORTH HOUSTON, TX 77315	March 26, 2015 6:59 am
Arrived at USPS Origin Facility	NORTH HOUSTON, TX 77315	March 25, 2015 10:11 pm
Departed Post Office	HOUSTON, TX 77058	March 25, 2015 6:17 pm
Acceptance	HOUSTON, TX 77058	March 25, 2015 4:17 pm

Reminder: USPS Tracking™ by email

Date of email request: March 27, 2015

Future activity will continue to be emailed for up to 2 weeks from the Date of Request shown above. If you need to initiate the USPS Tracking™ by email process again at the end of the 2 weeks, please do so at the USPS Tracking™ web site at <http://www.usps.com/shipping/trackandconfirm.htm>

Results provided by the U.S. Postal Service.

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For more information go to <https://www.usps.com/text-tracking/welcome.htm>

**Sandra Nichols**

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**Subject:** FW: USPS Shipment Info for 70123050000133027516

**From:** [US Postal Service@usps.com](mailto:US_Postal_Service@usps.com) [[mailto:US Postal Service@usps.com](mailto:US_Postal_Service@usps.com)]

**Sent:** Monday, March 30, 2015 11:01 AM

**To:** Sandra Nichols

**Subject:** USPS Shipment Info for 70123050000133027516

This is a post-only message. Please do not respond.

Sandra Nichols has requested that you receive a USPS Tracking™ update, as shown below.

USPS Tracking™ e-mail update information provided by the U.S. Postal Service.

Label Number: [70123050000133027516](#) **LEA COUNTY MANAGER**

Service Type: Certified Mail™

Shipment Activity	Location	Date & Time
Delivered	LOVINGTON, NM 88260	March 30, 2015 9:48 am
Business Closed	LOVINGTON, NM 88260	March 28, 2015 8:13 am
Out for Delivery	LOVINGTON, NM 88260	March 28, 2015 6:59 am
Sorting Complete	LOVINGTON, NM 88260	March 28, 2015 6:49 am
Arrived at Unit	LOVINGTON, NM 88260	March 28, 2015 6:41 am
Departed USPS Facility	LUBBOCK, TX 79402	March 27, 2015 11:41 pm
Arrived at USPS Origin Facility	LUBBOCK, TX 79402	March 27, 2015 6:50 am
Departed USPS Facility	NORTH HOUSTON, TX 77315	March 26, 2015 1:11 am
Arrived at USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 10:12 pm
Departed Post Office	HOUSTON, TX 77058	March 25, 2015 6:17 pm
Acceptance	HOUSTON, TX 77058	March 25, 2015 4:20 pm

Reminder: USPS Tracking™ by email

Date of email request: March 27, 2015

Future activity will continue to be emailed for up to 2 weeks from the Date of Request shown above. If you need to initiate the USPS Tracking™ by email process again at the end of the 2 weeks, please do so at the USPS Tracking™ web site at <http://www.usps.com/shipping/trackandconfirm.htm>

Results provided by the U.S. Postal Service.

Want to Track on the go?

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For more information go to <https://www.usps.com/text-tracking/welcome.htm>



**Sandra Nichols**

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**Subject:** FW: USPS Shipment Info for 70123050000133024973

**From:** [US Postal Service@usps.com](mailto:US_Postal_Service@usps.com) [[mailto:US Postal Service@usps.com](mailto:US_Postal_Service@usps.com)]  
**Sent:** Wednesday, April 08, 2015 8:53 AM  
**To:** Sandra Nichols  
**Subject:** USPS Shipment Info for 70123050000133024973 **RANDY D. SMITH**

This is a post-only message. Please do not respond.

Sandra Nichols has requested that you receive a USPS Tracking™ update, as shown below.

USPS Tracking™ e-mail update information provided by the U.S. Postal Service.

Label Number: [70123050000133024973](#)

On Time  
Expected Delivery Date: March 28, 2015  
Service Type: Certified Mail™

Shipment Activity	Location	Date & Time
Available for Pickup	CARLSBAD, NM 88221	March 28, 2015 10:04 am
Out for Delivery	CARLSBAD, NM 88220	March 28, 2015 8:04 am
Sorting Complete	CARLSBAD, NM 88220	March 28, 2015 7:54 am
Arrived at Unit	CARLSBAD, NM 88220	March 28, 2015 6:39 am
Departed USPS Facility	LUBBOCK, TX 79402	March 27, 2015 11:41 pm
Arrived at USPS Origin Facility	LUBBOCK, TX 79402	March 27, 2015 6:53 am
Departed USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 11:10 pm
Arrived at USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 10:13 pm
Departed Post Office	HOUSTON, TX 77058	March 25, 2015 6:17 pm
Acceptance	HOUSTON, TX 77058	March 25, 2015 4:20 pm

Reminder: USPS Tracking™ by email

Date of email request: April 8, 2015

Future activity will continue to be emailed for up to 2 weeks from the Date of Request shown above. If you need to initiate the USPS Tracking™ by email process again at the end of the 2 weeks, please do so at the USPS Tracking™ web site at <http://www.usps.com/shipping/trackandconfirm.htm>

Results provided by the U.S. Postal Service.

Want to Track on the go?

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For more information go to <https://www.usps.com/text-tracking/welcome.htm>

**Sandra Nichols**

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**Subject:** FW: USPS Shipment Info for 70123050000133024959

**From:** [US Postal Service@usps.com](mailto:US_Postal_Service@usps.com) [[mailto:US Postal Service@usps.com](mailto:US_Postal_Service@usps.com)]

**Sent:** Tuesday, March 31, 2015 2:59 PM

**To:** Sandra Nichols

**Subject:** USPS Shipment Info for 70123050000133024959

This is a post-only message. Please do not respond.

Sandra Nichols has requested that you receive a USPS Tracking™ update, as shown below.

USPS Tracking™ e-mail update information provided by the U.S. Postal Service.

Label Number: [70123050000133024959](#) **SNYDER RANCH**

Service Type: Certified Mail™

Shipment Activity	Location	Date & Time
Delivered	HOBBS, NM 88240	March 31, 2015 1:26 pm
Available for Pickup	HOBBS, NM 88240	March 30, 2015 3:13 pm
Departed USPS Facility	LUBBOCK, TX 79402	March 27, 2015 11:41 pm
Arrived at USPS Origin Facility	LUBBOCK, TX 79402	March 27, 2015 6:54 am
Departed USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 10:42 pm
Arrived at USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 10:12 pm
Departed Post Office	HOUSTON, TX 77058	March 25, 2015 6:17 pm
Acceptance	HOUSTON, TX 77058	March 25, 2015 4:20 pm

Reminder: USPS Tracking™ by email

Date of email request: March 27, 2015

Future activity will continue to be emailed for up to 2 weeks from the Date of Request shown above. If you need to initiate the USPS Tracking™ by email process again at the end of the 2 weeks, please do so at the USPS Tracking™ web site at <http://www.usps.com/shipping/trackandconfirm.htm>

Results provided by the U.S. Postal Service.

Want to Track on the go?

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For more information go to <https://www.usps.com/text-tracking/welcome.htm>

**Sandra Nichols**

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**Subject:** FW: USPS Shipment Info for 70123050000133024980

**From:** [US Postal Service@usps.com](mailto:US_Postal_Service@usps.com) [mailto:[US Postal Service@usps.com](mailto:US_Postal_Service@usps.com)]

**Sent:** Monday, March 30, 2015 4:17 PM

**To:** Sandra Nichols

**Subject:** USPS Shipment Info for 70123050000133024980

This is a post-only message. Please do not respond.

Sandra Nichols has requested that you receive a USPS Tracking™ update, as shown below.

USPS Tracking™ e-mail update information provided by the U.S. Postal Service.

Label Number: [70123050000133024980](#) **SOUTHWESTERN PUBLIC SERVICE**

Service Type: Certified Mail™

Shipment Activity	Location	Date & Time
Delivered	DENVER, CO 80201	March 30, 2015 7:09 am
Departed USPS Origin Facility	DENVER, CO 80266	March 28, 2015 1:52 am
Arrived at USPS Origin Facility	DENVER, CO 80266	March 27, 2015 7:07 am
Departed USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 10:44 pm
Arrived at USPS Facility	NORTH HOUSTON, TX 77315	March 25, 2015 10:11 pm
Departed Post Office	HOUSTON, TX 77058	March 25, 2015 6:17 pm
Acceptance	HOUSTON, TX 77058	March 25, 2015 4:20 pm

Reminder: USPS Tracking™ by email

Date of email request: March 27, 2015

Future activity will continue to be emailed for up to 2 weeks from the Date of Request shown above. If you need to initiate the USPS Tracking™ by email process again at the end of the 2 weeks, please do so at the USPS Tracking™ web site at <http://www.usps.com/shipping/trackandconfirm.htm>

Results provided by the U.S. Postal Service.

Want to Track on the go?

You can track your packages using USPS Text Tracking™ by texting your tracking number to 28777 (2USPS™) or selecting the Text Update option on our USPS Tracking™ site.

For more information go to <https://www.usps.com/text-tracking/welcome.htm>

**Sandra Nichols**

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**Subject:** FW: USPS Shipment Info for 70123050000133024928

**From:** [US Postal Service@usps.com](mailto:US_Postal_Service@usps.com) [[mailto:US\\_Postal\\_Service@usps.com](mailto:US_Postal_Service@usps.com)]

**Sent:** Wednesday, April 08, 2015 8:51 AM

**To:** Sandra Nichols

**Subject:** USPS Shipment Info for 70123050000133024928

This is a post-only message. Please do not respond.

Sandra Nichols has requested that you receive a USPS Tracking™ update, as shown below.

USPS Tracking™ e-mail update information provided by the U.S. Postal Service.

Label Number: [70123050000133024928](#) **INTERNATIONAL ISOTOPES**

On Time

Expected Delivery Date: April 6, 2015

Service Type: Certified Mail™

Shipment Activity	Location	Date & Time
Delivered	LOVINGTON, NM 88260	April 6, 2015 9:44 am
Arrived at Unit	LOVINGTON, NM 88260	April 6, 2015 7:20 am
Departed USPS Origin Facility	LUBBOCK, TX 79402	April 5, 2015 4:31 am
Arrived at USPS Origin Facility	LUBBOCK, TX 79402	April 5, 2015 12:20 am
Departed USPS Facility	NORTH HOUSTON, TX 77315	April 3, 2015 2:52 am
Arrived at USPS Facility	NORTH HOUSTON, TX 77315	April 2, 2015 11:59 pm
Departed Post Office	HOUSTON, TX 77058	April 2, 2015 6:18 pm
Acceptance	HOUSTON, TX 77058	April 2, 2015 8:34 am

Reminder: USPS Tracking™ by email

Date of email request: April 8, 2015

Future activity will continue to be emailed for up to 2 weeks from the Date of Request shown above. If you need to initiate the USPS Tracking™ by email process again at the end of the 2 weeks, please do so at the USPS Tracking™ web site at <http://www.usps.com/shipping/trackandconfirm.htm>

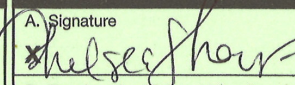
Results provided by the U.S. Postal Service.

Want to Track on the go?

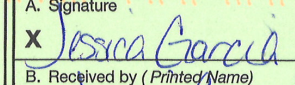
You can track your packages using USPS Text Tracking™ by texting your tracking number to 28777 (2USPS™) or selecting the Text Update option on our USPS Tracking™ site.

For more information go to <https://www.usps.com/text-tracking/welcome.htm>

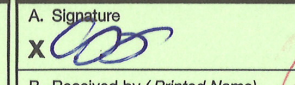


SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Signature  <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to: MS. ANNI BETZEN RISK MGR, City of Hobbs 200 E. BROADWAY HOBBS, NM 88240		B. Received by (Printed Name) Chelsea Shaw C. Date of Delivery 3-30-15	
		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
		3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
2. Article Number (Transfer from service label)		7012 3050 0001 3302 5000	
PS Form 3811, February 2004		Domestic Return Receipt 102595-02-M-1540	

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Signature  <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to: MIKE ELLAGHER, LEA COUNTY MGR. ATTN: SANDRA SIEGEL-BERKE 100 N. MAIN SUITE 4 LOVINGTON NM 88260		B. Received by (Printed Name) Jessica Garcia C. Date of Delivery 3-30-15	
		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
		3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
2. Article Number (Transfer from service label)		7012 3050 0001 3302 7516	
PS Form 3811, February 2004		Domestic Return Receipt 102595-02-M-1540	

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Signature  <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to: EL PASO NATURAL GAS P.O. Box 4372 HOUSTON TX 77210		B. Received by (Printed Name) Chris C. Date of Delivery 3-30-15	
		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
		3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
2. Article Number (Transfer from service label)		7012 3050 0001 3302 4966	
PS Form 3811, February 2004		Domestic Return Receipt 102595-02-M-1540	



SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"><li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li><li>■ Print your name and address on the reverse so that we can return the card to you.</li><li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li></ul>		<p>A. Signature <input checked="" type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) Tim Callery</p> <p>C. Date of Delivery 3-31-15</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input checked="" type="checkbox"/> No</p>	
1. Article Addressed to: DAMELAK HEWARD ETAL CARLIN PROPERTIES LLC P.O. BOX 188 MENDOTA NM 88245-0188		3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
2. Article Number (Transfer from service label) 7012 3050 0001 3302 4942		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, February 2004		Domestic Return Receipt 102595-02-M-1540	

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"><li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li><li>■ Print your name and address on the reverse so that we can return the card to you.</li><li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li></ul>		<p>A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) Kristie Parish</p> <p>C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>	
1. Article Addressed to: International Isotopes 100 N Main St #4 Lovington NM 88260		3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
2. Article Number (Transfer from service label) 7012 3050 0001 3302 4928		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, February 2004		5-02-M-1540	

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"><li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li><li>■ Print your name and address on the reverse so that we can return the card to you.</li><li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li></ul>		<p>A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) Corretta Casner</p> <p>C. Date of Delivery 3-30-15</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>	
1. Article Addressed to: Southwestern Public Service Co. Ppty. Tax Dept P.O. Box 840 DENVER, CO 80201-0840		3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
2. Article Number (Transfer from service label) 7012 3050 0001 3302 4980		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, February 2004		Domestic Return Receipt 102595-02-M-1540	

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Signature X <i>[Signature]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to: <i>SNYDER RANCHES, LTD</i> <i>P.O. Box 2158</i> <i>HOBBBS, NM</i> <i>88241</i>		B. Received by (Printed Name) <i>LARRY SMITH</i> C. Date of Delivery <i>3-31-15</i> D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Transfer from service label) <i>7012 3050 0001 3302 4959</i>		3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540			

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Signature X <i>[Signature]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to: <i>RANDY D. SMITH</i> <i>P.O. Box 4033</i> <i>CARLSBAD, NM</i> <i>88221-4033</i>		B. Received by (Printed Name) <i>RANDY SMITH</i> C. Date of Delivery <i>4-9-15</i> D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Transfer from service label) <i>7012 3050 0001 3302 4973</i>		3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540			

## **Public Notice Posted Locations**

The public notices were posted in the following four publicly accessible and conspicuous places:

- Hobbs City Hall
- Hobbs Public Library
- Hobbs Power Station
- Online Hobbs Community Bulletin Board of Hobbs City Hall ([www.hobbsnm.org/buletin\\_board.html](http://www.hobbsnm.org/buletin_board.html))



## Copy of 2014 Property Tax Record Document

DISTRIBUTION	TAXABLE VALUE	TAX RATES	AMOUNT DUE
STATE -N/R	66666667	1.360	90666.67
COUNTY -N/R	66666667	10.600	706666.67
SCHOOL -N/R	66666667	9.617	641133.33
NON-RES SUBTOTAL	66666667	21.577	1438466.67
JUNIOR COLLEGE	66666667	5.000	333333.34
<b>TOTAL</b>			<b>1771800.01</b>

# 2014 TAX BILL

Remit to: **DONNA DUNCAN**  
**Lea County Treasurer**  
 100 N Main Ave Suite 3C  
 Lovington NM 88260-4000  
 (575) 396-8643

BILL NO.: 2014-0017645

OWNER NO.: 0205769

PROPERTY DESCRIPTION	
PROPERTY # 4 000 407 020 001 SECTION-23 TOWNSHIP-18S RANGE-36E 160.00 AC BEING S2NE4, N2SE4 CAB# 220-019 UNPROTESED VALUE 7/16/07-SMITH, RANDY D PRT #40702 2007-LEA POWER PARTNERS (INCORRECT) SW4 SEC 24 CHANGED SUBSEQUENT FOR 2007 & CORRECTED FOR 2008 B-1486 P-636 2014 UNPROTESTED VALUE PROPERTY # 4 971 119 095 721 SECTION-24 TOWNSHIP-18S RANGE-36E 153.03 AC BEING SW4 4LESS TR BEG S50D21'38"E 420.10' FROM NE COR SW4 SEC 24, TH S00D28'E 510', S89D32'W 595', N00D28'W 510', N89D32'E 595', TO BEG (6.97 AC) 12/19/06-SMITH, RANDY D PRT #40702 B-1486 P-636 2007-WAS ALL LEA POWER PARTNERS (INCORRECT) SUBSEQUENT FOR 2007 6/27/07-REDESCRIBED PRT TO #90111 SOUTHWESTERN PUBLIC SERVICE CO (6.97 AC) B-1520 P-994	12/5/11-DEDICATION OF 1.63 AC TO TOMBLY LANE

School District: 160

RESIDENTIAL	FULL VALUE	TAXABLE VALUE
NON-RES	FULL VALUE	TAXABLE VALUE
CENTRAL	200000001	66666667
NET		66666667
<b>TOTAL NET VALUE</b>		<b>66666667</b>

Your mortgage company may be paying this bill:

However, it is the responsibility of the property owner to ensure property taxes are paid. Owners with mortgages should contact lender to determine responsibility for payment of tax.

First half payment or payment in full will be delinquent after December 10. Second half payment will be delinquent after May 10.

**THIS IS THE ONLY NOTICE YOU WILL RECEIVE FOR BOTH INSTALLMENTS OF TAX.**

Your canceled check is your receipt unless you provide a self-addressed, stamped envelope.

(You may pay online at [www.leacounty.net](http://www.leacounty.net) or call 1-575-396-8643, Visa, MasterCard, Discover & Amex.)

YEAR	BILL NO.	TAX	INTEREST	PENALTY	LATE	AMOUNT DUE

RECEIVED OCT 22 2014 *dg*

**PRIOR TAXES, IF ANY, MUST BE PAID BEFORE ACCEPTING CURRENT YEAR PAYMENT.**

Tax Rates are expressed in Dollars per Thousand. Taxable Value is 33 1/3% of Full Value.

Remit to:

**DONNA DUNCAN**  
**Lea County Treasurer**  
 100 N Main Ave Suite 3C  
 Lovington NM 88260-4000  
 (575) 396-8643

## Lea County - 1ST HALF COUPON

Due November 10

1st Half Amount

\$885,900.01

The first half amount includes prior taxes if any.

[www.leacounty.net](http://www.leacounty.net)  
 Or Call 575-396-8643  
 A nominal fee is charged for this service.



TO PAY IN FULL \$1,771,800.01

Bill No: 2014-0017645 Owner No: 0205769

Print this Bill No. &amp; Owner No. on your check or money order.

Send both coupons with full year payment or detach and return this coupon with first half payment. Keep the coupon to the right for second half payment. To avoid interest and penalty charges, pay by December 10th.

191816

LEA POWER PARTNERS LLC  
 98 TOMBLBY LN  
 HOBBS NM 88240-9359

23751

☐ If your address has changed, please check this box and indicate address changes on the back of this coupon.

## Lea County - 2ND HALF COUPON

Due April 10

2nd Half Amount

\$885,900.00

[www.leacounty.net](http://www.leacounty.net)  
 Or Call 575-396-8643  
 A nominal fee is charged for this service.



Bill No: 2014-0017645

Owner No: 0205769

Print this Bill No. &amp; Owner No. on your check or money order.

Owner:  
**LEA POWER PARTNERS LLC**  
 98 TOMBLBY LN  
 HOBBS NM 88240-9359

Remit to:

**Lea County Treasurer**  
 100 N Main Ave Suite 3C  
 Lovington NM 88260-4000  
 (575) 396-8643

To avoid interest and penalty charges, pay by May 10. Detach and return this coupon with second half payment by May 10.

☐ If your address has changed, please check this box and indicate address changes on the back of this coupon.

100-6326-13

## Sample of Letters Sent to Property Owners, Counties, Municipalities and Indian Tribes



**Hobbs Generating Station**  
 98 N. Twombly Lane  
 Hobbs, NM 88240  
 Ph 575-397-6700 Fax 575-397-6795

### Copy of Certified Letters Sent to Property Owners, City of Hobbs and Lea County

{DATE}

{NAME and ADDRESS}

RE: CERTIFIED MAIL \_\_\_\_\_

Dear Sir/Madam,

According to New Mexico air quality regulations, **Lea Powers Partners, LLC** must announce its intent to apply to the New Mexico Environment Department for a modification of the site's air quality permit to increase the emission rates of the auxiliary equipment at its **Hobbs Generating Station**. The expected date of application submittal to the Air Quality Bureau is **April 13, 2015**.

The exact location for the proposed facility known as **Hobbs Generating Station** is at 98 N. Twombly Lane, Hobbs, NM 88240. The approximate location of this facility is 10 miles W. of Hobbs in Lea County, New Mexico.

The proposed modification consists of increasing the authorized emission rates of the firewater pump; the standby generator; the auxiliary cooling towers and the inlet chiller cooling towers. These units have not been modified or upgraded since they were initially installed, however, Lea Power Partners, LLC wishes to correct the discrepancies between the currently authorized emission rates and the emission rates achievable according to the unit's manufacturer data. In addition, a new gasoline tank will be installed onsite. The estimated maximum quantities of any regulated air contaminant will be:

Pollutant:	Pounds per hour	Tons per year
Total Suspended Particulates (TSP)	35.3	88.6
PM <sub>10</sub>	34.9	87.3
PM <sub>2.5</sub>	34.9	87.3
Sulfur Dioxide (SO <sub>2</sub> )	22.4	48.5
Nitrogen Oxides (NO <sub>x</sub> )	50.5	184.7
Carbon Monoxide (CO)	24.5	280.8
Volatile Organic Compounds (VOC)	7.1	96.7
Total sum of all Hazardous Air Pollutants (HAPs)	1.2	3.4
Total sum of all Toxic Air Pollutants (TAPs)	64.2	281.3
Green House Gas Emissions as Total CO <sub>2</sub> e	n/a	1,897,124

These emission estimates could change slightly during the course of the Department's review of the application.

The standard operating schedule of the facility will be 24 hours a day, 7 days a week and a maximum of 52 weeks per year. The maximum operating schedule will be 24 hours a day, 7 days a week and a maximum of 52 weeks per year.

Owners and operators of the facility include:

**Owner:** Lea Power Partners, LLC, 919 Milam Street, Suite 2300, Houston, TX, 77002

**Operator:** CAMS - NM, 98 N. Twombly Lane, Hobbs, NM 88240

If you have any comments about the proposed permit changes or operation of the above facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to the address below:

Permit Programs Manager  
New Mexico Environment Department  
Air Quality Bureau  
525 Camino de los Marquez, Suite 1  
Santa Fe, New Mexico 87505-1816  
(505) 476-4300

Other comments and questions may be submitted verbally.

Please refer to the company name and facility name, as used in this notice or send a copy of this notice along with your comments, since the Department may not have received the permit application at the time of this notice. Please include a legible mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

Sincerely,



**David Baugh**

Asset Manager, Lea Power Partners, LLC  
919 Milam Street, Suite 2300  
Houston, TX 77002

**Notice Posted in Public Accessible Places****Notice Posted in Publicly Accessible Places**

# NOTICE

According to New Mexico air quality regulations, Lea Powers Partners, LLC must announce its intent to apply to the New Mexico Environment Department for an air quality permit to increase the emission rates of the auxiliary equipment at its **Hobbs Generating Station**. The expected date of application submittal to the Air Quality Bureau is **April 13, 2015**.

The exact location for the proposed facility known as **Hobbs Generating Station** is at 98 N. Twombly Lane Hobbs, NM 88240. The approximate location of this facility is 10 miles W. of Hobbs in Lea County, New Mexico.

The proposed modification consists of increasing the authorized emission rates of the firewater pump; the standby generator; the auxiliary cooling towers and the inlet chiller cooling towers. These units have not been modified or upgraded since they were initially installed, however, Lea Power Partners, LLC wishes to correct the discrepancies between the currently authorized emission rates and the emission rates achievable according to the unit's manufacturer data. In addition, a new gasoline tank will be installed onsite. The estimated maximum quantities of any regulated air contaminant will be:

Pollutant:	Pounds per hour	Tons per year
Total Suspended Particulates (TSP)	35.3	88.6
PM <sub>10</sub>	34.9	87.3
PM <sub>2.5</sub>	34.9	87.3
Sulfur Dioxide (SO <sub>2</sub> )	22.4	48.5
Nitrogen Oxides (NO <sub>x</sub> )	50.5	184.7
Carbon Monoxide (CO)	24.5	280.8
Volatile Organic Compounds (VOC)	7.1	96.7
Total sum of all Hazardous Air Pollutants (HAPs)	1.2	3.4
Total sum of all Toxic Air Pollutants (TAPs)	64.2	281.3
Green House Gas Emissions as Total CO <sub>2</sub> e	n/a	1,897,124

These emission estimates could change slightly during the course of the Department's review of the application.

The standard operating schedule of the facility will be 24 hours a day, 7 days a week and a maximum of 52 weeks per year. The maximum operating schedule will be 24 hours a day, 7 days a week and a maximum of 52 weeks per year.

Owners and operators of the facility include:

**Owner:** Lea Power Partners, LLC, 919 Milam Street, Suite 2300, Houston, TX 77002  
**Operator:** CAMS- NM, 98 N. Twombly Lane Hobbs, NM 88240

If you have any comments about the construction or operation of the above facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to the address below:

Permit Programs Manager  
New Mexico Environment Department  
Air Quality Bureau  
525 Camino de los Marquez, Suite 1  
Santa Fe, New Mexico 87505-1816  
Phone: (505) 476-4300 or 1 800 224-7009  
Fax: (505) 476-4375

Other comments and questions may be submitted verbally.

Please refer to the company name and site name, as used in this notice or send a copy of this notice along with your comments, since the Department may not have received the permit application at the time of this notice. Please include a legible mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

**Local Posting Verification****General Posting of Notices – Certification**

I, Daniela Grajola, the undersigned, certify that I posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in or close to the City of Hobbs, Lea County, State of New Mexico and that these signs remained in place for the time period of 3/27, 2015 to 4/27/2015, when the final amended air permit was issued:

1. Hobbs Generating Station entrance
2. Hobbs Public Library
3. Hobbs City Hall

Signed this 27<sup>th</sup> day of March, 2015.

Daniela Grajola  
Signature

Daniela Grajola  
Printed Name

Manager, Division Accounts  
Title



**General Posting of Notices – Certification**

I, Sally Owens, the undersigned, certify that I posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in or close to the City of Hobbs, Lea County, State of New Mexico and that these signs remained in place for the time period of March 27, 2015 to April 27 2015, when the final amended air permit was issued:

1. Hobbs Generating Station entrance
2. Hobbs Public Library
3. Hobbs City Hall

Signed this 27<sup>th</sup> day of March, 2015

Sally Owens

Signature

SALLY OWENS

Printed Name

Circulation Technician

Title

**General Posting of Notices – Certification**

I, Ann Betzen, the undersigned, certify that I posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in or close to the City of Hobbs, Lea County, State of New Mexico and that these signs remained in place for the time period of 3-30-15, 2015 to 4-30-15, when the final amended air permit was issued:

1. Hobbs Generating Station entrance
2. Hobbs Public Library
3. Hobbs City Hall

Signed this 30<sup>th</sup> day of March, 2015.

Ann Betzen

Signature

Ann Betzen

Printed Name

Risk Manager

Title

**Receipt of Public Notice – Certification**

I, Joseff Amador, the undersigned, certify that on 3/27 I received a public notice to be posted on the online Community Bulletin Board ([http://www.hobbsnm.org/bulletin\\_board.html](http://www.hobbsnm.org/bulletin_board.html)) that serves the Hobbs City of Lea County, New Mexico, in which the source is or is proposed to be located.

Signed this 27 day of March, 2015.

Joseff Amador  
Signature

3/27/15  
Date

Joseff Amador  
Printed Name



### List of Entities Receiving the Certified Letters

Hobbs Generating Station is located in Lea County, which is considered a Class B County, based on county population and assessed property value<sup>1</sup>. Therefore, based on the NMED regulation 20.2.72.203(B)(1), public notifications consisting of a certified letter describing the permit application were sent to the property owners that are within one-half mile of the Hobbs property boundary. The names and addresses of the property owners within one-half mile from Hobbs Station property boundary were requested from Ms. Sharia Kennedy, Lea County Assessor.

Additionally, the NMED regulation 20.2.72.203(B)(2) requires that notices be sent to all municipalities and counties in which the facility is or will be located and all municipalities, counties, and Indian tribes that are within a 10 mile radius from the boundary of the property on which the facility is or will be located. The list of all municipalities in Lea County was obtained from <http://www.nmml.org/>. Hobbs Generating Station is located 10 miles west of Hobbs, New Mexico, in Lea County and the distance from this Station to the borders of Lea County is more than 10 miles in all directions. Therefore, a public notification consisting of a certified letter describing the permit was sent to City of Hobbs (Ms. Ann Betzen - Risk Manager of City of Hobbs) and to Lea County (Mr. Mike Gallagher - Lea County Manager). No additional notifications were submitted as no Indian tribes are located within a 10 mile radius from the Hobbs property line. Table 9.1 summarizes the entities that received the certified letters.

**Table 9–1 List of Entities Receiving the Certified Letters**

Entity	Address
City of Hobbs	Ann Betzen- Risk Manager City of Hobbs 200 E. Broadway
Lea County	Mike Gallagher- Lea County Manager Attn: Sandra Stout-Brito 100 North Main Suite 4
Southwestern Public Service Company	PO Box 840, Denver, CO, TX 77210
Snyder Ranches, Inc.	PO Box 2158 , Hobbs, NM 88241
El Paso Natural Gas Company	PO Box 4372, Houston, TX 77210
Carlin Properties, LLC	PO Box 188, Monument, NM 88265-0188
International Isotopes, Inc.	100 N Main, Suite 4, Lovington, NM 88260
Randy and Naomi Smith	PO Box 633, Carlsbad, NM 88221-0633

<sup>1</sup> [http://www.nmdfa.state.nm.us/Annual\\_Report\\_2010.aspx](http://www.nmdfa.state.nm.us/Annual_Report_2010.aspx)

## Copy of the Public Service Announcement (PSA) Sent to KYKK Radio Station

### PUBLIC SERVICE ANNOUNCEMENT

1) Name, location and type of business

Hobbs Generating Station

98 N. Twombly Lane Hobbs, NM 88240. The approximate location of this facility is 10 miles W. of Hobbs in Lea County, New Mexico

The plant generates electricity for sale to Southwestern Public Service, its successors or assigns

2) Name of principal owner or operator

Lea Power Partners, LLC

919 Milam Street, Suite 2300

Houston, TX 77002

3) The type of process or change for which a permit is sought

The proposed modification consists of increasing the authorized emission rates of the firewater pump; the standby generator; the auxiliary cooling towers and the inlet chiller cooling towers. These units have not been modified or upgraded since they were initially installed, however, Lea Power Partners, LLC wishes to correct the discrepancies between the currently authorized emission rates and the emission rates achievable according to the unit's manufacturer data. In addition, a new gasoline tank will be installed onsite.

4) Locations where the notices have been posted

Public notices have been sent/posted as follows:

- Property Owners within ½ mile radius of the Hobbs Generating Station property boundary
- City of Hobbs Risk Manager, Ms. Ann Betzen
- Lea County Manager, Mr. Mike Gallagher
- Hobbs News Sun Newspaper
- Entrance Gate to Hobbs Generating Station
- Hobbs Public Library
- Hobbs City Hall
- Online Community Bulletin Board of Hobbs City Hall  
([www.hobbsnm.org/bulletin\\_board.html](http://www.hobbsnm.org/bulletin_board.html))

5) The NMED address or telephone number to which comments can be directed

Permit Programs Manager  
New Mexico Environment Department  
Air Quality Bureau  
525 Camino de los Marquez, Suite 1  
Santa Fe, New Mexico 87505-1816  
Phone: (505) 476-4300 or 1 800 224-7009  
Fax: (505) 476-4375

**Copy of the "Submittal of Public Service Announcement – Certification"****Submittal of Public Service Announcement – Certification**

I, Sandra Nichols, the undersigned, certify that on March 27, 2015, I submitted a public service announcement to **KYKK Radio Station** (format – Talk/Information/Sports) that serves the City of Hobbs, Lea County, New Mexico, in which Hobbs Generating Station is located and that KYKK Radio Station responded that they have received the announcement.

Signed this 27 day of March, 2014.



Signature

3/27/15

Date

Sandra Nichols

Printed Name

Sr. Environmental Associate  
Title

**Affidavit of Publication – Legal Notice****Affidavit of Publication**


STATE OF NEW MEXICO  
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

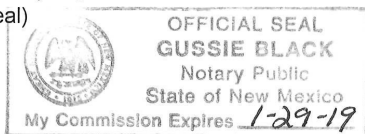
Beginning with the issue dated  
March 31, 2015  
and ending with the issue dated  
March 31, 2015.

  
\_\_\_\_\_  
Publisher

Sworn and subscribed to before me this  
31st day of March 2015.

  
\_\_\_\_\_  
Business Manager

My commission expires  
January 29, 2019  
(Seal)



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL	LEGAL	LEGAL																																	
<b>LEGAL NOTICE</b> March 31, 2014																																			
<b>NOTICE OF AIR QUALITY PERMIT APPLICATION</b>																																			
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00154066

MONA JOHNSON  
CAMS eSPARC, LLC  
1110 NASA PKWY, Ste 212  
HOUSTON, TX 77058



ing name and site name, as used in this notice or send a copy of comments, unless the Department may not have received in time of this notice. Please include a legible mailing address as the Department has performed a preliminary review of the impacts. The Department's notice will be published in the regulated area's facility location.

**Affidavit of Publication – Display Notice****Affidavit of Publication**

STATE OF NEW MEXICO  
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

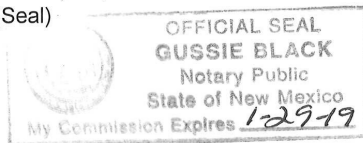
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\_\_\_\_\_  
Business Manager

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00154155

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CAMS eSPARC, LLC  
1110 NASA PKWY, Ste 212  
HOUSTON, TX 77058



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**Owner:** Lea Power Partners, LLC, 919 Milam Street, Suite 2300, Houston, TX 77002

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HOBBS NEWS-SUN • TUESDAY, MARCH 31, 2015

SPORTS 9



From left are photos showing college basketball players Willie Cauley-Stein, Kentucky; Jerian Grant, Notre Dame; Frank Kaminsky, Wisconsin; Jahli Okafor, Duke and D'Angelo Russell, Ohio State. Cauley-Stein, Grant, Kaminsky, Okafor and Russell were selected to the AP All-America team Monday.

All-America

from PAGE 7

unanimous pick in as many years following Doug McDermott of Creighton.

Okafor is Duke's 16th first-team All-America and is the Blue Devils' second freshman in as many years, with Jabari Parker being chosen last season.

Okafor, who received 61 first-team votes, averaged 17.1 points and 11.1 rebounds while shooting 66.9 percent, second in the nation.

"His game has grown continuously and he's got a lot more growth ahead of him," Duke coach Mike Krzyzewski said. "The main thing for Jah is that he's gotten better as the season's gone along."

At Notre Dame, Grant's career was in jeopardy last season when he was suspended for the second semester for what he called an academic mistake. The son of former NBA player Harvey Grant star returned for his senior season and averaged 16.8 points and 6.6 assists while playing 36.6 minutes per game.

"I can't think of a better comeback story in college basketball the last couple years than Jerian," Notre Dame coach Mike Brey said. "When I told him you need to come back because we have a finished business, I didn't know it would be this good and I am thrilled that it is this good because I was nervous it wouldn't be this good. He came back

for all the right reasons."

Grant, who received 53 first-team votes and is Notre Dame's first All-America since Troy Murphy repeated in 2001, said receiving an honor like this makes his decision to return that much sweeter.

"It's great, especially with where I was last year," he said. "The work I've put in, the guys having so much confidence in me to welcome me back like that."

Cauley-Stein and his teammates are chasing history with an undefeated season in just two wins away. The 7-footer is the first first-team All-America to average less than 10 points per game. He averaged 13.3 points while grabbing 6.4 rebounds and shooting 38.8 percent. He anchors Kentucky's stifling defense.

"Coming in I felt like I was really overlooked and didn't know if I really belonged but just worked and worked and worked and eventually became a player that everybody looks at like 'Dude, you're a freak athlete, you're a beast,'" said Cauley-Stein, who received 45 first-team votes. "You can do so many things that I never imagined even happening and now it's coming together."

He is the 18th All-American from Kentucky and first since Anthony Davis in 2012.

Russell is another freshman who isn't expected to be back for a second season. He averaged 19.3 points, 5.6 rebounds and 5.1 assists and received 51 first-team votes. Russell is 15th All-American from Ohio State and the first since Jared Sullinger repeated in 2012.

"The level that he sustained was the most impressive thing," Buckeyes coach Thad Matta said. "The other thing that I loved was that the mistakes early, he learned from. He got better as the season went on. He became a more complete player. We knew he was going to be really good but just seeing his dedication to becoming a great player was very, very impressive."

Utah senior DeJon Wright led the second team and was joined by Kentucky freshman Karl-Anthony Towns, Northern Iowa senior Seth Tuttle, Arkansas sophomore Bobby Portis and Virginia junior Malcolm Brogdon.

The third team was Gonzaga teammates Kyle Wiltjer and Kevin Pangos, Oklahoma junior Buddy Hield, Syracuse senior Rakem Christmas and Iowa State junior Georges Niang.

The voting, by the same 65-member media panel that selects the weekly Top 25, was done before the NCAA Tournament.

Briefs

**Falcons penalized for pumping up noise**

ATLANTA (AP) — In the midst of two losing seasons, the Atlanta Falcons tried to pump up the noise.

It's going to cost them.

The NFL announced Monday that it had fined the team \$50,000, stripped away a draft pick and suspended team president Rich McKay from the league's powerful Competition Committee for at least three months after the Falcons conceded pumping artificial crowd noise into the Georgia Dome.

For owner Arthur Blank, the whole episode has been a huge embarrassment on top of firing long-time coach Mike Smith after last season and dealing with criticism over a pricey seat-licensing plan to help fund the team's new stadium.

"What took place was wrong and nowhere near the standards by which we run our business," Blank said in a statement. "Anytime there are actions that compromise the integrity of the NFL or threaten the culture of our franchise, as this issue did, they will be dealt with swiftly and strongly."

**Saban defends signing player now kicked off team**

TUSCALOOSA, Ala. (AP) — Alabama coach Nick Saban steadfastly defended his signing of defensive lineman Jonathan Taylor, who has now been kicked off his second Southeastern Conference team for domestic violence arrests.

"Taylor, who some say should never have been on the team, was one of two Crimson Tide players arrested over the weekend. Defensive back Geno Smith was charged with the second DUI including the second DUI of his Alabama career."

A defiant Saban was unapologetic Monday about choosing to sign Taylor, who was also dismissed from Georgia before signing with Alabama for similar allegations of domestic violence.

"I'm not sorry for giving him an opportunity," Saban said. "I'm sorry for the way things worked out."

"I'm not apologizing for the opportunity that we gave him. I wanted to try to help the guy make it work. It didn't work. We're sorry that it didn't work and we're sorry that there was an incident and we're sorry for the people that were involved in the incident. But we're not apologizing for what we did, and we're going to continue to try to create opportunities in the future."

**UConn has to fight for Final Four return**

ALBANY, N.Y. (AP) — Getting to the Final Four never gets old for Geno Auriemma and his UConn Huskies.

Kalena Mosqueda-Lewis scored 27 points to help UConn beat Dayton 91-70 on Monday night to advance to the national semifinals for an eighth straight season.

Now the Huskies stand two wins away from a third straight national championship. They accomplished that same feat from 2002-04.

**Bronco will skip workouts if no deal reached**

ENGLEWOOD, Colo. (AP) — Peyton Manning will have to do without his top target this offseason unless the Denver Broncos reach an agreement with Demaryius Thomas on a long-term contract.

The star receiver said Monday that without a deal, he'll skip the team's offseason workouts that begin April 13 and bypass Manning's annual passing camp next week at Duke.

Thomas said he'll stay in Georgia, where he'll continue rehabbing his right ankle, which was hurt Dec. 3 when a teammate stepped on him, hampering him down the stretch.

Lottery numbers

<b>N.M. PICK 3</b>	<b>TEXAS DAILY 4</b>
2-3-2	8-2-1-2 (morning); 3-6-2-8 (day);
<b>ROADRUNNER CASH</b>	3-0-4-0 (evening); 0-2-1-2 (night)
2-4-1-4-3-5	<b>CASH FIVE TEXAS</b>
<b>TEXAS PICK 3</b>	19-24-25-30-35
7-9-6 (morning); 6-8-1 (day);	<b>TEXAS TWO STEP</b>
1-8-3 (evening); 0-5-7 (night)	13-22-24-27 (08-2)

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Final Four

from PAGE 7

coach John Calipari said.

Now they get to face Wisconsin, which like Kentucky, is making its second straight Final Four appearance.

Last year's national semifinal came down to a big jumper by Aaron Harrison with 5.7 seconds left.

"That loss left a sour taste in my mouth, so we wanted to get back," Wisconsin's Sam Deldener said of the loss to Kentucky. "As a team we set some goals of what we wanted to do, and now we've won two games away from our last goal."

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**COACHING ROYALTY:** Tying UCLA's Wooden puts Krzyzewski one appearance ahead of Dean Smith, who made 11 trips to the Final Four. Coach K is tied with Adolph Rupp for second in trips with four.

"I'm in this moment. I've been so lucky to be at Duke for 35 years and in the ACC, and the

great players we've had and my past is not important right now," Krzyzewski said.

"My present is incredibly important and just being with these kids and sharing this moment and this Final Four, I'm so happy. I'm so happy for them and to be with them... I love my team. I love my team. They are a pleasure to be with, and as a result they're taking me to Indy, which is kind of neat."

All the coaches except Wisconsin's Bo Ryan, who made his Final Four debut last year at age 66, have won a national championship. Michigan State's Tom Izzo won it all in 2000, while John Calipari took the title with Kentucky in 2012.

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**SPARTY PARTY:** Of the four teams headed to Indianapolis, only Michigan State didn't have an impressive regular season. The Spartans had 11 losses, four more than the other three teams combined. They were 10th in the

AP's preseason poll and were out of the rankings for most of the season, getting back in the final poll at No. 23.

But relying on coach Tom Izzo's trademark offensive rebounding and team defense, Michigan State made the improbable run to the Final Four.

"I'd like to tell you that I thought five different times this year that we were good enough to get to a Final Four, but I'd be lying to you," Izzo said, adding this was the best of his seven regional final victories. The team didn't want to be a group that didn't make it, and that was a "battle cry" all year long, Izzo said.

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**UNDEATED TEAMS:** Kentucky is the first undefeated team to reach the Final Four since UNLV in 1991. The Runnin' Rebels lost in the national semifinals to Duke, which went on to win the first of consecutive championships.

Indiana State was the last team

Softball

from PAGE 7

"I just kept telling the kids to hang in there and chip away a run at a time," Crossland said. "We just needed to make the adjustments at the plate. Portales is a really good team. It was a quality win against a solid ball club and I'm proud of the way we battled back."

Crossland commended Heckard for her plate patience in her final at-bat.

"That's just real clutch hitting on her part," he said. "She's done that type of thing for us for three years now, so we've grown used to it. She did a

great job with the game on the line."

Heckard finished the night 2-for-4 with a double, a home run, two RBI and two runs scored while Allen was 3-for-5 with three RBI, Lewis was 2-for-3 with a double, a triple and two RBI, Portales' Kaila Ramirez finished 4-for-4 with a double, a home run and two RBI.

Hobbs will travel to Roswell for a doubleheader on April 7.

"We're going to give the kids a couple of days off and get back at it Thursday and Friday," Crossland said.

Bombing

from PAGE 7

cutters, describing various photos and a video showing the scene of the second blast both before and shortly after the explosions.

In one of the photos, Martin Richard, his sister and several other children stand on a metal barricade. Tsarnaev appears to be just a few feet behind Martin and his sister.

While cross-examining Gamble, Tsarnaev's lawyers showed other photographs with several people in between Tsarnaev and the children, an apparent attempt to show that Tsarnaev didn't purposefully target them with the bomb.

When the defense called Gamble as its first witness, Tsarnaev's lawyer, Miriam Conrad, asked her about a book titled "Windy" that was found during a search of the Tsarnaev family's apartment in Cambridge. Gamble said the book was found under the living room couch.

Tsarnaev's lawyers have tried to show that he was not living in the apartment when the bombings occurred because he was attending the University of Massachusetts-Dartmouth. Tamerlan Tsarnaev was living in the apartment with his wife and their young daughter.

During their case, prosecutors presented heart-wrenching testimony from survivors who lost legs in the bombings. A string of first responders described a chaotic mix of smoke, blood and screams just after the bombs went off.



The defense will try to show that Tamerlan Tsarnaev was more culpable in the attack and in the killing three days later of Massachusetts Institute of Technology police Officer Sean Collier.

If the jury convicts Tsarnaev — an event that may be a foregone conclusion because of his admitted guilt — the trial will move on to the second phase, when the same jury will hear more evidence to decide whether Tsarnaev should be put to death or should spend the rest of his life in prison.

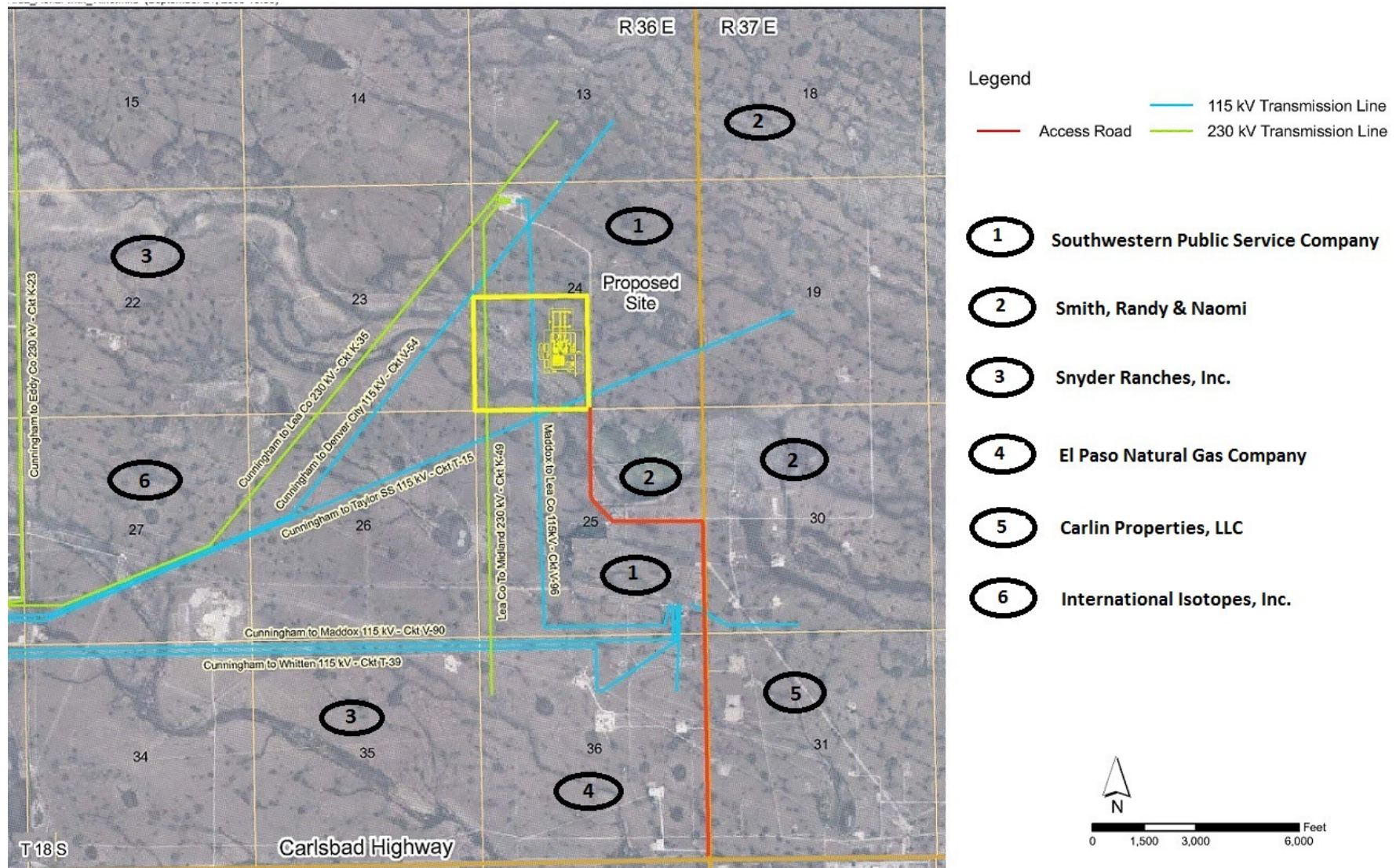
During this second phase of the trial, Tsarnaev's lawyers will present evidence of factors they believe mitigate his crimes, such as his age at the time — 19 — and the influence of his older brother.

The Tsarnaevs — ethnic Chechens — lived in the former Soviet republic of Kyrgyzstan and the volatile Dagestan region of Russia before moving to the U.S. with their parents and two sisters about a decade before the bombings.

Prosecutors will present evidence of aggravating factors, such as the brutality of the attack and the death of a child, to argue that Tsarnaev should be executed.



### Map of Hobbs and Surrounding Area in Which Owners Were Notified by Mail



# Section 10

## Written Description of the Routine Operations of the Facility

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**A written description of the routine operations of the facility.** Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

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Hobbs is a natural gas fueled, nominal 600 MW net output power plant with two advanced firing temperature, Mitsubishi 501F CTGs, each provided with its own HRSG including duct burners, a single condensing, reheat STG, and an air cooled condenser serving the STG. The plant generates electricity for sale to Southwestern Public Service Company, its successors or assigns. The facility is located approximately 9 miles west of Hobbs, New Mexico in Lea County.

The exhaust from each CTG is delivered to a HRSG that produces the steam to drive the STG. Supplemental firing, using duct burners, is employed during periods of peak demand to increase HRSG steam production.

A surface condenser (heat exchanger) is used to condense the steam exhaust from the STG. Condensing the steam produces a slight vacuum, thus increasing the pressure differential that drives the steam turbine and increasing the overall efficiency of the power plant. Dry cooling is utilized to condense the steam exhaust from the steam turbine.

Several small emission sources are used at Hobbs, including 3 inlet chillers, 3 auxiliary cooling towers, 3 natural gas fuel heaters, a firewater pump, a standby generator and a number of storage tanks. The inlet air chilling system consists of 3 crossflow cooling towers that serve to enhance the overall output of the plant by lowering the temperature of the air entering the CTGs during periods of high ambient temperature (November through May). The auxiliary cooling towers consist of 3 crossflow closed-circuit wet cooling towers. The natural gas fuel heaters are used to pretreat the natural gas before it is fed to the CTGs. The firewater pump diesel engine is used to provide fire protection water for the plant and operates under 100 hours per year. The standby diesel generator operates under 500 hours per year and is used to provide the plant electrical requirements during complete black-out situations. Both engines fire low sulfur diesel fuel only.

Storage tanks at the site include two diesel tanks for the firewater pump diesel engine and the standby generator diesel engine, two additional diesel storage tanks, one gasoline storage tank, an aqueous ammonia storage tank for the SCR NOx emissions control unit, a caustic storage tank and an aqueous sulfuric acid storage tank for the cooling towers pH control, a neutralization tank that serves the wastewater facility, and several water storage tanks.

# Section 11

## Source Determination

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, Single Source Determination Guidance, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

**A. Identify the emission sources evaluated in this section (list and describe):**

Auxiliary Cooling Towers (AC-1, AC-2, and AC-3), Inlet Chillers (IC-1, IC-2 and IC-3), Standby Generator (G-1), Diesel Fire Pump (FP-1), Diesel Storage Tanks (T-7 and T-8) and gasoline storage tank (T-9).

**B. Apply the 3 criteria for determining a single source:**

**SIC Code:** Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, OR surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

☒ **Yes**      ☐ **No**

**Common Ownership or Control:** Surrounding or associated sources are under common ownership or control as this source.

☒ **Yes**      ☐ **No**

**Contiguous or Adjacent:** Surrounding or associated sources are contiguous or adjacent with this source.

☒ **Yes**      ☐ **No**

**C. Make a determination:**

☒ The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "YES" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "NO" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.

☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

# Section 12

## Section 12.A

### PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

**A PSD applicability determination for all sources.** For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

A. This facility is:

- ☐ a minor PSD source before and after this modification (if so, delete C and D below).
- ☐ a major PSD source before this modification. This modification will make this a PSD minor source.
- ☐ an existing PSD Major Source that has never had a major modification requiring a BACT analysis.
- ☒ an existing PSD Major Source that has had a major modification requiring a BACT analysis
- ☐ a new PSD Major Source after this modification.

B. This facility is one of the listed 20.2.74.501 Table I – PSD Source Categories. The “project” emissions for this modification are **not significant as proposed project increases do not exceed the PSD Significant Emission Rate (SER) for each pollutant (refer to Table 12-1 below)**. The “project” emissions listed below only result from changes described in this permit application, thus no emissions from **other revisions or modifications, past or future** to this facility. **This project will not cause or generate any additional emissions.** The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:

- a. **NOx: 184.7 TPY**
- b. **CO: 280.9 TPY**
- c. **VOC: 96.7 TPY**
- d. **SOx: 48.5 TPY**
- e. **TSP (PM): 88.6 TPY**
- f. **PM10: 87.3 TPY**
- g. **PM2.5: 86.1 TPY**
- h. **Fluorides: N/A**
- i. **Lead: N/A**
- j. **Sulfur compounds (listed in Table 2): N/A**
- k. **GHG: 1,897,124 TPY**

C. **Netting is not required (project is not significant)**

D. **BACT is not required for this modification, as this application is a minor modification.**

E. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

Hobbs is located in Lea County, an area that is classified by the U.S. EPA as attainment with the NAAQS for all regulated pollutants. The facility is included as one of the 28-named sources under PSD rules and is a major source as defined by the PSD rules (40 CFR §52.21). The estimated annual emission rate increases for the proposed increase in the auxiliary equipment allowable emission rates are summarized in Table 12-1.



**Table 12–1 PSD Applicability Analysis**

<b>Air Pollutant</b>	<b>Past Actuals (tpy)</b>	<b>Proposed Project Annual (tpy)</b>	<b>Proposed Project Increase Only (tpy)</b>	<b>PSD SER (tpy)</b>	<b>Netting Required?</b>	<b>PSD Review Required?</b>
NO <sub>x</sub>	0	2.0	2.0	40	N/A	No
CO	0	0.3	0.3	100	N/A	No
VOC	0	0.2	0.2	40	N/A	No
SO <sub>2</sub>	0	0.1	0.1	40	N/A	No
PM <sub>10</sub>	0	1.3	1.3	10	N/A	No
PM <sub>2.5</sub>	0	0.04	0.04	15	N/A	No
CO <sub>2</sub> e	0	241.49	241.49	75,000	N/A	No

Past actual emissions were conservatively assumed to be zero for all pollutants. The proposed project increases are below the PSD Significant Emission Rate (SER) for all regulated pollutants. Consequently, the proposed modification constitutes a minor modification of an existing major source.

## Section 12.B

### Special Requirements for a PSD Application

(Submitting under 20.2.74 NMAC)

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**Prior to Submitting a PSD application, the permittee shall:**

- ☒ Submit the BACT analysis for review prior to submittal of the application. No application will be ruled complete until the final determination regarding BACT is made, as this determination can ultimately affect information to be provided in the application. A pre-application meeting is recommended to discuss the requirements of the BACT analysis. *As requested by NMED a BACT analysis for the firewater pump diesel engine, the standby generator diesel engine, the auxiliary cooling towers, the inlet chillers and the diesel and gasoline storage tanks is included in this section, rather than prior to application submittal.*
- ☒ Submit a modeling protocol prior to submitting the permit application. **[Except for GHG]** *As recommended by NMED an Air Dispersion Modeling Protocol was submitted to New Mexico Environmental Department on April 1, 2015. On April 9, 2015 Mr. Sufi Mustafa approved the modeling protocol.*
- ☐ Submit the monitoring exemption analysis protocol prior to submitting the application. **[Except for GHG]** *N/A- this is not a PSD major modification.*

**For PSD applications, the permittee shall also include the following:**

- ☐ Documentation containing an analysis on the impact on visibility. **[Except for GHG]**
  - ☐ Documentation containing an analysis on the impact on soil. **[Except for GHG]**
  - ☐ Documentation containing an analysis on the impact on vegetation, including state and federal threatened and endangered species. **[Except for GHG]**
  - ☐ Documentation containing an analysis on the impact on water consumption and quality. **[Except for GHG]**
  - ☐ Documentation that the federal land manager of a Class I area within 100 km of the site has been notified and provided a copy of the application, including the BACT and modeling results. The name of any Class I Federal area located within one hundred (100) kilometers of the facility.
- N/A*
-

## 12.B.1 BACT Analysis

The Best Available Control Technology (BACT) analysis for the auxiliary equipment is presented in this section. NMED Chapter 20.2.74.302 requires that BACT be applied to minimize emissions from any new or modified sources. The auxiliary equipment is not new or modified. However, an increase in allowable emission rates is requested to be consistent with vendor-representations. The discussion of proposed BACT for each source type is provided in the following sections.

This revision application is submitted to resolve emission rate representations of some of the auxiliary equipment operating at Hobbs, these include the firewater pump diesel engine (FP-1), the standby generator diesel engine (G-1), the auxiliary cooling water towers (AC-1, AC-2 and AC-3) and the inlet chillers (IC-1, IC-2 and IC-3). No physical changes or changes in the method of operation have been made to any of these units; nonetheless currently authorized emission rates are not achievable according to vendor information. Therefore, through this permitting action, LPP is requesting that emission rates for these units be updated to reflect the vendor-provided emission factors.. Although no physical change or change in the method of operation is proposed for any of these units, LPP is presenting this BACT analysis to demonstrate continuous compliance with BACT requirements. In addition to these changes, LPP wishes to authorize a new 500 gallon gasoline tank and two diesel storage tanks.

Table 12 - 1 summarizes the control technologies proposed for the Hobbs auxiliary equipment to meet BACT. These control technologies are consistent with those currently in practice and already approved by NMED for the initial construction authorization. The auxiliary equipment have met these proposed BACT levels since construction.

**Table 12 - 1 Summary of BACT Control Methods for Hobbs Auxiliary Equipment**

Pollutant	Proposed BACT	Proposed Concentration Limit	Averaging Period
<b>Firewater Pump Diesel Engine (FP-1)</b>			
NO <sub>x</sub> , CO, VOC, SO <sub>2</sub> , PM <sub>10</sub> /PM <sub>2.5</sub>	Good combustion practices Use of Ultra-Low Sulfur Diesel Annual operation limited to 100 hours	N/A	N/A
<b>Standby Diesel Generator (G-1)</b>			
NO <sub>x</sub> , CO, VOC, SO <sub>2</sub> , PM <sub>10</sub> /PM <sub>2.5</sub>	Good combustion practices Use of Ultra Low Sulfur Diesel Annual operation limited to 500 hours	N/A	N/A
<b>Auxiliary Cooling Towers (AC-1, AC-2 and AC-3)</b>			
PM <sub>10</sub> /PM <sub>2.5</sub>	Use of drift eliminators	Drift Loss = 0.001%wt	N/A
<b>Inlet Chillers (IC-1, IC-2 and IC-3)</b>			
PM <sub>10</sub> /PM <sub>2.5</sub>	Use of drift eliminators	Drift Loss = 0.001%wt	N/A
<b>Diesel Storage Tanks (T-7, T-8)</b>			
VOC	Insignificant emissions	None	N/A
<b>Gasoline Storage Tank (T-9)</b>			
VOC	Insignificant emissions	None	N/A



### **BACT Analysis for the Firewater Pump (FP-1)**

Hobbs operates the diesel firewater pump for no more than 100 hours per year. The limited operating time results in insignificant annual pollutant emission rates. In addition, the unit fires ultra-low sulfur diesel and is operated following manufacturer recommendations for good combustion practices. No additional controls are proposed to satisfy BACT requirements for all criteria pollutants.

Control technologies listed at US EPA RBLC database for firewater pump diesel engines include good combustion practices, use of ultra-low sulfur diesel and limited annual operations.

### **BACT Analysis for the Standby Diesel Generators (G-1)**

Hobbs operates the standby diesel generator for no more than 500 hours per year. The limited operating time results in low annual pollutant emission rates. In addition, the unit fires ultra-low sulfur diesel and is operated following manufacturer recommendations for good combustion practices. No additional controls are proposed to satisfy BACT requirements for all criteria pollutants.

Control technologies listed at US EPA RBLC database for standby diesel engines include good combustion practices, use of ultra-low sulfur diesel and limited annual operations.

### **BACT Analysis for the Auxiliary Cooling Towers (AC-1, AC-2 and AC-3)**

Particulate matter (TSP) is generated by the presence of dissolved and suspended solids in the cooling tower circulation water, which is potentially lost as “drift” or moisture droplets that are suspended in the air moving out of the cooling tower. A portion of the water droplets emitted from the tower exhaust will evaporate, allowing the suspended or dissolved solids to deposit at ground-level.

Particulate matter (TSP) emissions from cooling towers can be controlled by minimizing the drift loss that occurs and/or minimizing the amount of dissolved solids in the water. This can be accomplished by using high efficiency drift eliminators, a decreased number of cycles of circulating water concentration, or a combination of both. The number of cycles of water concentration is limited by the amount of water available for use, since lower levels of concentration require increased cooling tower blowdown and more water intake to offset the blowdown.

Drift eliminators are a technically feasible control option for particulate emissions from cooling towers. There are no significant energy, environmental, or economic impacts that would preclude the use of drift eliminators. The Hobbs auxiliary cooling towers are equipped with drift eliminators that limit the drift loss to 0.001% by weight. A RBLC database search shows drift eliminators as the proposed BACT in the range of 0.0005% weight control up to 0.001% weight. Therefore, the current drift loss represents BACT and Hobbs is not proposing any additional controls.

### **BACT Analysis for the Inlet Chillers (IC-1, IC-2 and IC-3)**

Particulate matter (TSP) is generated by the presence of dissolved and suspended solids in the cooling tower circulation water, which is potentially lost as “drift” or moisture droplets that are suspended in the air moving out of the cooling tower. A portion of the water droplets emitted from the tower exhaust will evaporate, allowing the suspended or dissolved solids to deposit at ground-level.

Particulate matter (TSP) emissions from cooling towers can be controlled by minimizing the drift loss that occurs and/or minimizing the amount of dissolved solids in the water. This can be accomplished by using high efficiency drift eliminators, a decreased number of cycles of circulating water concentration, or a combination of both. The number of

cycles of water concentration is limited by the amount of water available for use, since lower levels of concentration require increased cooling tower blowdown and more water intake to offset the blowdown.

Drift eliminators are a technically feasible control option for particulate emissions from inlet chillers. There are no significant energy, environmental, or economic impacts that would preclude the use of drift eliminators. Hobbs inlet chillers are equipped with drift eliminators that limit the drift loss to 0.001% by weight. A RBLC database search shows drift eliminators as the proposed BACT in the range of 0.0005% weight control up to 0.001% weight. Therefore, the current drift loss represents BACT and Hobbs is not proposing any additional controls.

### **BACT Analysis for the Diesel Storage Tanks (T-7 and T-8)**

Volatile organic compounds (VOC) emissions from the 500-gallon and 100-gallon diesel storage tanks are inherently low (< 0.5 tpy); therefore, Hobbs is not proposing any controls other than the correct operation and maintenance of the tank.

### **BACT Analysis for the Gasoline Storage Tank (T-9)**

Volatile organic compounds (VOC) emissions from the 500 gallon gasoline storage tank are inherently low (< 0.5 tpy); therefore, Hobbs is not proposing any controls other than the correct operation and maintenance of the tank.

# Section 13

## Discussion Demonstrating Compliance with Each Applicable State & Federal Regulation

**Provide a discussion demonstrating compliance with applicable state & federal regulation.** If there is a state or federal regulation (other than those listed here) for your facility's source category that does not apply to your facility, but seems on the surface that it should apply, add the regulation to the appropriate table below and provide the analysis. Examples of regulatory requirements that may or may not apply to your facility include 40 CFR 60 Subpart OOO (crushers), 40 CFR 63 Subpart HHH (HAPs), or 20.2.74 NMAC (PSD major sources). We don't want a discussion of every non-applicable regulation, but if there is questionable applicability, explain why it does not apply. All input cells should be filled in, even if the response is 'No' or 'N/A'.

In the "Justification" column, identify the criteria that are critical to the applicability determination, numbering each. For each unit listed in the "Applies to Unit No(s)" column, after each listed unit, include the number(s) of the criteria that made the regulation applicable. For example, TK-1 & TK-2 would be listed as: TK-1 (1, 3, 4), TK-2 (1, 2, 4). Doing so will provide the applicability criteria for each unit, while also minimizing the length of these tables.

As this table will become part of the SOB, please do not change the any formatting in the table, especially the width of the table.

If this application includes any proposed exemptions from otherwise applicable requirements, provide a narrative explanation of these proposed exemptions. These exemptions are from specific applicable requirements, which are spelled out in the requirements themselves, not exemptions from 20.2.70 NMAC or 20.2.72 NMAC.

**Table 13-1 demonstrates compliance with each applicable State Regulations.**

**Table 13-1 Applicable State Regulations**

<b>STATE REGU- LATIONS CITATION</b>	<b>Title</b>	<b>Applies to Entire Facility</b>	<b>Applies to Unit No(s).</b>	<b>Federally Enforce- able</b>	<b>Does Not Apply</b>	<b>JUSTIFICATION: Identify the applicability criteria, numbering each (i.e. 1. Post 7/23/84, 2. 75 m<sup>3</sup>, 3. VOL)</b>
20.2.3 NMAC	Ambient Air Quality Standards NMAAQs	X	All	Yes		20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.
20.2.7 NMAC	Excess Emissions	X	All	Yes		All Title V major sources are subject to Air Quality Control Regulations, as defined in 20.2.7 NMAC, and are thus subject to the requirements of this regulation. Also listed as applicable in NSR Permit PSD 3449-M2
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide		DB-1, DB-2	Yes		Hobbs duct burners are new gas burning equipment with a heat input greater than 1,000,000 MMBtu/yr per unit. Hobbs fuel gas heaters are new gas burning equipment with a heat input less than 1,000,000 MMBtu/yr, therefore this part does not apply to these equipment.  Note: "New gas burning equipment" means gas burning equipment, the construction or modification of which is commenced after February 17, 1972.
20.2.34 NMAC	Oil Burning Equipment: NO <sub>2</sub>	N/A	N/A	Yes	X	Not applicable. This facility has no oil burning equipment having a heat input of greater than 1,000,000 MMBtu/yr per unit.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	N/A	N/A	N/A	X	Not applicable. Hobbs is not a Natural Gas Processing Plant; therefore, it is not subject to the requirements of 20.2.35 NMAC.

<b>STATE REGU- LATIONS CITATION</b>	<b>Title</b>	<b>Applies to Entire Facility</b>	<b>Applies to Unit No(s).</b>	<b>Federally Enforce- able</b>	<b>Does Not Apply</b>	<b>JUSTIFICATION: Identify the applicability criteria, numbering each (i.e. 1. Post 7/23/84, 2. 75 m<sup>3</sup>, 3. VOL)</b>
20.2.37 NMAC	Petroleum Processing Facilities	N/A	N/A	No	X	Not applicable. Hobbs is not a Petroleum Processing Facility; therefore, it is not subject to the requirements of 20.2.37 NMAC.
<a href="#">20.2.38</a> NMAC	Hydrocarbon Storage Facilities	N/A	N/A	No	X	Not applicable. Hobbs does not have hydrocarbon storage tanks with a capacity of 20,000 gallons or greater, nor does it contain a "tank battery" or "Storage facility".
<a href="#">20.2.39</a> NMAC	Sulfur Recovery Plant - Sulfur	N/A	N/A	No	X	Not applicable. Hobbs is not a Sulfur Recovery Plant.
20.2.61.109 NMAC	Smoke & Visible Emissions		HOBB-1, HOBB-2, DB-1, DB-2, FH-1, FH-2, FH-3, G-1 and FP-1	No		Hobbs CTGs, HRSG duct burners, fuel gas heaters, standby generator and diesel fire pump will not cause visible emissions to equal or exceed an opacity of 20%.
20.2.70 NMAC	Operating Permits	X	All	Yes		Hobbs operates under Operating Permit No. P244-M4. The facility is a major source for NOx, CO, PM <sub>10</sub> /PM <sub>2.5</sub> and CO <sub>2</sub> e.
20.2.71 NMAC	Operating Permit Fees	X	All	Yes		Hobbs is subject to 20.2.70 NMAC and is therefore subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	X	All	Yes		Hobbs is subject to 20.2.72 NMAC and NSR Permit number: PSD 3449-M2.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	X	All	Yes		<b>Emissions Inventory Reporting:</b> 20.2.73.300 NMAC applies. All Title V major sources meet the applicability requirements of 20.2.73.300 NMAC.
20.2.74 NMAC	Permits – PSD	X	All	Yes		Hobbs is a PSD major source as defined by: (1) Any stationary source listed in 20.2.74.501 NMAC Table 1 (i.e., fossil fuel-fired steam electric facilities greater than 250 MMBtu) which emits, or has the potential to emit, emissions equal to or greater than 100 tons per year of any regulated pollutant.
20.2.75 NMAC	Construction Permit Fees	X	All	Yes		This facility is subject to 20.2.72 NMAC and is in turn subject to 20.2.75 NMAC. N/A if subject to 20.2.71 NMAC.
20.2.77 NMAC	New Source Performance		HOBB-1, HOBB-2, G-1	Yes		Hobbs is a stationary source subject to the requirements of 40 CFR Part 60, as amended through September 23, 2013.
20.2.78 NMAC	Emission Standards for HAPS	X	N/A	Yes	X	Under normal operating conditions the site is not subject to 40 CFR Part 61. Refer to Table 13-2 40 CFR Part 61 Subpart M for further discussion.
20.2.79 NMAC	Permits – Nonattainment Areas	N/A	N/A	Yes	X	Not applicable. Hobbs is located in Lea County, an attainment area for all regulated pollutants.
20.2.80 NMAC	Stack Heights	N/A	N/A	Yes	X	Not cited as applicable in NSR Permit PSD 3449-M2.
20.2.82 NMAC	MACT Standards for source categories of HAPS		G-1, FP-1	Yes		Hobbs is a minor source of hazardous air pollutants. The standby generator and fire water pump are subject to 40 CFR 63 Subpart ZZZZ.

**Table 13–2** demonstrates compliance with each applicable Federal Regulations.

**Table 13–2 Applicable Federal Regulations**

<b>FEDERAL REGU- LATIONS CITATION</b>	<b>Title</b>	<b>Applies to Entire Facility</b>	<b>Applies to Unit No(s).</b>	<b>Federally Enforce- able</b>	<b>Does Not Apply</b>	<b>JUSTIFICATION:</b>
40 CFR 50	NAAQS	X	N/A	Yes		Defined as applicable at 20.2.70.7.E.11. Any national ambient air quality standard. Not directly applicable to individual emission sources.
NSPS 40 CFR 60, Subpart A	General Provisions		HOBB-1, HOBB-2, DB-1, DB-2, G-1	Yes		Hobbs CTGs and HRSG duct burners are subject to 40 CFR 60 Subpart KKKK. Hobbs standby generator is subject to 40 CFR 60 Subpart IIII; therefore these units are also subject to 40 CFR 60 Subpart A - General Provisions.
NSPS 40 CFR 60 Subpart Da	Electric Utility Steam Generating Units	N/A	N/A	Yes	X	Not applicable. Emissions from the HRSG duct burners are subject to 40 CFR 60 Subpart KKKK and therefore are exempt from the requirements of Subpart Da.
NSPS 40 CFR 60 Subpart Db	Electric Utility Steam Generating Units	N/A	N/A	Yes	X	Not applicable. Emissions from the HRSG duct burners are subject to 40 CFR 60 Subpart KKKK and therefore are exempt from the requirements of Subpart Db.
NSPS 40 CFR 60, Subpart Ka	Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	N/A	N/A	Yes	X	Not applicable. Hobbs has no petroleum liquid storage vessels subject to this regulation.
NSPS 40 CFR 60, Subpart Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	N/A	N/A	Yes	X	Not applicable. Hobbs does not have storage vessels with a capacity greater than or equal to 75 cubic meters that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.
NSPS 40 CFR 60 Subpart GG	Stationary Gas Turbines	N/A	N/A	Yes	X	Units HOBB-1 and HOBB-2 have a heat input equal to 1,697 MMBtu/hour (nominal), which is greater than the 10 MMBtu/hour threshold. These units were manufactured on 2007 which is after the October 3, 1977 applicability date.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from Onshore Gas Plants	N/A	N/A	Yes	X	Not applicable. Hobbs is not an Onshore Gas Plant.

<b><u>FEDERAL REGU- LATIONS CITATION</u></b>	<b>Title</b>	<b>Applies to Entire Facility</b>	<b>Applies to Unit No(s).</b>	<b>Federally Enforce- able</b>	<b>Does Not Apply</b>	<b>JUSTIFICATION:</b>
NSPS 40 CFR 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	N/A	N/A	Yes	X	Not applicable. Hobbs is not an Onshore Natural Gas Processing plant.
NSPS 40 CFR 60, Subpart IIII	Stationary Compression Ignition Internal Combustion Engines		G-1	Yes		Hobbs Diesel Standby Generator was manufactured after July 1, 2006 and is not a fire pump engine. Therefore this unit is subject to the provisions of NSPS IIII, (§60.4200(a)(2)(i)). Hobbs Diesel Fire Water Pump, was manufactured and constructed in 2011, before all applicable trigger dates in the rule; therefore it is not subject to NSPS IIII.
NSPS 40 CFR 60, Subpart KKKK	Stationary Combustion Turbines		HOBB-1, HOBB-2, DB-1, DB-2			HOBB-1 and HOBB-2 are stationary combustion turbines with a heat input at peak load greater than 10 MMBtu/hr (HHV) and commenced construction after February 18, 2005. Therefore the units are subject to the provisions of NSPS KKKK. The HRSG duct burners are also subject to the provisions of NSPS KKKK.
NSPS 40 CFR 60 Subpart OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution	N/A	N/A	Yes	X	Not applicable. Hobbs is not a Crude Oil and Natural Gas Production, Transmission and Distribution facility.
NESHAP 40 CFR 61 Subpart A	General Provisions	X Potentially	Asbestos Demolition	Yes		Potentially Hobbs could be subject to 40 CFR 61 Subpart M. Refer to discussion below.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for <b>Mercury</b>	N/A	N/A	Yes	X	Not applicable. This facility does not process mercury.
NESHAP 40 CFR 61 Subpart M	National Emission Standards for Asbestos	X Potentially	Asbestos Demolition	Yes		Not applicable during routine operation conditions. In the case of asbestos demolition, NESHAP M will apply.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	N/A	N/A	Yes	X	Not applicable. Hobbs does not operate any sources in volatile hazardous air pollutant (VHAP) service.
MACT 40 CFR 63, Subpart A	General Provisions		G-1 FP-1 T-9	Yes		The Hobbs Diesel Standby Generator and Diesel Fire Water Pump are subject to MACT Subpart ZZZZ, and the gasoline storage tank is subject to MACT Subpart CCCCCC, therefore these sources must comply with the requirements of MACT Subpart A.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	N/A	N/A	Yes	X	Not applicable. Hobbs is not an Oil and Natural Gas Production facility.

<b>FEDERAL REGU- LATIONS CITATION</b>	<b>Title</b>	<b>Applies to Entire Facility</b>	<b>Applies to Unit No(s).</b>	<b>Federally Enforce- able</b>	<b>Does Not Apply</b>	<b>JUSTIFICATION:</b>
MACT 40 CFR 63 Subpart HHH	Natural Gas Transmission and Storage Facilities	N/A	N/A	Yes	X	Not applicable. Hobbs is not a natural gas transmission and storage facility.
MACT 40 CFR 63 Subpart ZZZZ	Stationary Reciprocating Internal Combustion Engines (RICE MACT)	N/A	G-1 FP-1	Yes		Hobbs Diesel Standby Generator (G-1) is a new (emergency) stationary RICE at an area source of HAPs. Per §63.6590(c)(1), G-1 meets the requirements of MACT ZZZZ by meeting the requirements of NSPS IIII.  Hobbs Diesel Fire Water Pump (FP-1) is an existing emergency RICE at an area source of HAPs and must comply with the requirements of MACT ZZZZ as of May 3, 2013.
MACT 40 CFR 63 Subpart CCCCC	Gasoline Dispensing Facilities	N/A	T-9	Yes		The affected source is located at an area source of HAPs. The proposed gasoline storage tank (T-9) will have a monthly throughput of less than 10,000 gallons of gasoline, and therefore, T-9 must comply with the requirements in §63.11116, which include: (1) minimize gasoline spills; (2) clean up spills as expeditiously as practicable; (3) cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and (4) minimize gasoline sent to open waste collection systems.
NESHAP 40 CFR 64	Compliance Assurance Monitoring	N/A	N/A	Yes	X	Hobbs CTGs/HRSG exhaust stacks are equipped with a CEMS that satisfy the CAM exemption requirements (§64.2(b)(1)(vi)).
NESHAP 40 CFR 68	Chemical Accident Prevention	N/A	N/A	Yes	X	Not applicable. Hobbs does not manufacture, process, use, store, or otherwise handle regulated substances in excess of the quantities specified in 10 CFR 68.
Title IV – Acid Rain 40 CFR 72	Acid Rain		HOBB-1, HOBB-2	Yes		Hobbs CTGs are subject to the requirements of the Acid Rain Program.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions		HOBB-1, HOBB-2	Yes		Hobbs must obtain SO <sub>2</sub> calendar year allowances.
Title IV – Acid Rain 40 CFR 75	Continues Emission Monitoring (CEM)		HOBB-1, HOBB-2	Yes		Hobbs CTG/HRSG exhaust stack is equipped with a CEMS for NO <sub>x</sub> , CO and O <sub>2</sub> .
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program		N/A	Yes	X	Hobbs is not subject to the acid rain nitrogen oxides emission reduction program.
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	X	N/A	Yes		Hobbs equipment includes appliances containing CFCs and is therefore subject to the requirements of 40 CFR 82. Hobbs uses only certified technicians for the maintenance, service, repair and disposal of these appliances and maintains the appropriate records.

# Section 14

## Operational Plan to Mitigate Emissions

(submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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- ☐ **Title V Sources** (20.2.70 NMAC): By checking this box and certifying this application the permittee certifies that it has developed an Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- ☒ **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- ☒ **Title V** (20.2.70 NMAC), **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.
- 

Startup and shutdown procedures are either based on manufacturer's recommendations and/or based on Hobbs operating experience. These procedures are designed to proactively address the potential for malfunction to the greatest extent possible. These procedures dictate a sequence of operations that are designed to minimize emissions from the facility during events that result in shutdown and subsequent startup.

Hobbs equipment incorporates various safety devices and features that aid in the prevention of excess emissions in the event of an operational emergency. If an operational emergency does occur and excess emissions occur, Hobbs will submit the required Excess Emissions Report as per 20.2.7 NMAC. Corrective action to eliminate the excess emissions and prevent recurrence in the future will be undertaken as quickly as safety allows.



# Section 15

## Alternative Operating Scenarios

(submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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**Alternative Operating Scenarios:** Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

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Hobbs Generating Station does not have an alternative operating scenario at this time.

# Section 16

## Air Dispersion Modeling

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**NSR (20.2.72 NMAC) and PSD (20.2.74 NMAC) Modeling:** Provide an air quality dispersion modeling demonstration (if applicable) as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines. If air dispersion modeling has been waived for this permit application, attach the AQB Modeling Section modeling waiver documentation.

**SSM Modeling:** Applicants must conduct dispersion modeling for the total short term emissions using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.nmenv.state.nm.us/aqb/permit/app\\_form.html](http://www.nmenv.state.nm.us/aqb/permit/app_form.html)) for more detailed instructions on SSM emissions modeling requirements.

**Title V (20.2.70 NMAC) Modeling:** Title V applications must specify the NSR Permit number for which air quality dispersion modeling was last submitted. Additionally, Title V facilities reporting new SSM emissions require modeling or a modeling waiver to demonstrate compliance with standards.

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An air dispersion modeling analysis has been completed and is provided as an attached document.

# Section 17

## Compliance Test History

(submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

**Table 17–1 Compliance Test History Table**

Unit No.	Permit No.	Permit Cond.	Test Description	Test Date
HOBB-1/DB-1	PSD 3449-M2	A401C	RATA testing in accordance with EPA test methods for NOx and CO.	9/17/2014
		A401E	Annual ammonia compliance testing.	9/17/2014
	PSD 3449-M1	A401C	RATA testing in accordance with EPA test methods for NOx and CO.	11/13/2013 11/7/2012 11/30/2011
		A401A <sup>(1)</sup>	Annual stack testing for NOx and CO.	11/13/2013 11/7/2012 11/30/2011
		A401E	Annual ammonia compliance testing.	11/13/2013 11/7/2012 11/30/2011
HOBB-2/DB-2	PSD 3449-M2.	A401C	RATA testing in accordance with EPA test methods for NOx and CO.	9/16/2014
		A401E	Annual ammonia compliance testing.	9/16/2014
	PSD 3449-M1	A401C	RATA testing in accordance with EPA test methods for NOx and CO.	11/14/2013 11/8/2012 12/1/2011
		A401A <sup>(1)</sup>	Annual stack testing for NOx and CO.	11/14/2013 11/8/2012 12/1/2011
		A401E	Annual ammonia compliance testing.	11/14/2013 11/8/2012 12/1/2011
G-1	PSD 3449-M2	A111 B	Opacity test.	9/17/2014
	PSD 3449-M1	A111 B	Opacity test.	11/12/2013 11/6/2012 11/29/2011
FP-1	PSD 3449-M1	A111 B	Opacity test.	9/17/2014
	PSD 3449-M1	A111 B	Opacity test.	11/12/2013 11/6/2012 11/29/2011

(1) Annual NOx and CO stack testing requirement was removed from permit PSD 3449-M2.

# Section 20

## Other Relevant Information

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**Other relevant information.** Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

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[All relevant information has been incorporated in the appropriate application pages.](#)

# Section 22

## Green House Gas Applicability

(submitting under 20.2.70, 20.2.72, 20.2.73, 20.2.74 NMAC)

**Title V (20.2.70 NMAC), NSR (20.2.72 NMAC), NOI (20.2.73 NMAC) and PSD (20.2.74 NMAC)** applicants must determine if they are subject to Title V permitting and/or PSD permitting for green house gas (GHG) emissions. GHG emissions are the sum of the aggregate group of six green house gases that include carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). There are two thresholds that must be computed to determine applicability. The first threshold is the sum of GHG mass emissions in TPY. GHG mass emissions are the sum of the total annual tons of green house gases without adjusting with the GWPs. The second threshold is the sum of CO<sub>2</sub> equivalent (CO<sub>2</sub>e) emissions in TPY GHG. CO<sub>2</sub>e emissions are the sum of the mass emissions of each individual GHG multiplied by its global warming potential (GWP) found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.

### Green House Gas TV and PSD Applicability Determination:

☐ **Notice of Intent Sources (20.2.73 NMAC):** By checking this box and certifying this application the applicant certifies that the facility, based upon the quantity of stack emissions, including start up, shut down, and maintenance emissions, is not subject to 20.2.70 NMAC or 20.2.74 NMAC for Green House Gas (GHG) Emissions. The Department may request the emissions calculations and other documents supporting this determination.

**Minor NSR (20.2.72 NMAC), PSD Major (20.2.74 NMAC), and Title V (20.2.70 NMAC)** sources must complete the steps outlined below to determine GHG TV and/or PSD applicability.

1. Calculate existing mass GHG and CO<sub>2</sub>e emissions from your source. For PSD purposes, if this is a modification to an existing source, you must also calculate the increase in mass GHG and CO<sub>2</sub>e emissions due to the modification. Start up, shut down, and maintenance emissions must be included.
2. See Tables 1 and 2 below and compare your mass GHG and CO<sub>2</sub>e emissions to the appropriate category for your source.
3. If your source meets all of the criteria within a category, then you must obtain a PSD permit and/or a Title V permit for green house gas emissions.
4. If this is a GHG Major source with an existing BACT or if this is a permit application for a PSD or Title V permit with GHG above the thresholds in Tables 1 or 2, include the emissions calculations and supporting documents in the appropriate sections of this application unless instructed otherwise in Tables 1 or 2. Report GHG mass and CO<sub>2</sub>e emissions in Table 2-P of this application unless instructed otherwise in Tables 1 or 2. Emissions are reported in short tons per year and represent each emission unit's Potential to Emit (PTE).

**NSR (20.2.72 NMAC), PSD Major (20.2.74 NMAC), and Title V (20.2.70 NMAC):** Based upon the GHG applicability criteria in this section the applicant certifies that the source is (check all that apply):

- ☐ Title V Minor and PSD Minor for GHG Emissions [The Department may request the emissions calculations and other documents supporting this determination.]
- ☐ Title V Major for GHG Emissions
- ☒ PSD Major for GHG Emissions

**Table 1 - Title V Applicability Criteria**

<b>On or after July 1, 2011, newly constructed source, or existing source that does not have a Title V permit</b>	<b>On or after July 1, 2011, modification or Renewal to Existing Title V Source</b>	<b>Requirement</b>
Source emits or has potential to emit (PTE) $\geq$ 100,000 TPY CO <sub>2</sub> e and 100 TPY GHG mass basis	Source emits or has PTE of $\geq$ 100,000 TPY CO <sub>2</sub> e and 100 TPY GHG mass basis	<p><b>For new sources:</b> For a source that meets the criteria on July 1, 2011, submit a Title V permit application no later than June 30, 2012.</p> <p>For a source that meets the criteria after July 1, 2011, submit a Title V application within 12 months of becoming subject to the GHG operating permit program (12 months from commencement of operation of the new unit or modification that caused the source to be subject to Title V).</p> <p><b>For existing sources:</b> Include GHG with the next Title V application for a renewal or modification.</p> <p><b>For both new and existing sources:</b> Include in the TV application, GHG emissions calculations and supporting documents, report CO<sub>2</sub>e and GHG emissions in Table 2-P, and address any applicable CAA requirements (e.g. PSD BACT, NSPS). If there are no applicable requirements and if GHG emissions have been reported to the Department under 20.2.73 NMAC, the requirements of the previous sentence do not apply, but changes in GHG emissions resulting in GHG emission limits must be calculated and reported in Table 2-P for Title V permit modifications. Typically GHG emission limits would be established only when there is an applicable requirement, such as a PSD GHG BACT or limits taken to be GHG synthetic minor.</p>

**Table 2 - PSD Applicability Criteria**

<b>On or After July 1, 2011, New Source</b>	<b>On or After July 1, 2011, Major Modification to Existing PSD Major Source</b>	<b>On or After July 1, 2011, Modification to Existing PSD Minor Source</b>	<b>Requirement</b>
<p>Source is subject to PSD for another pollutant and GHG PTE is <math>\geq</math> than 75,000 tpy CO<sub>2</sub>e</p> <p><b>or</b></p> <p>GHG PTE is <math>\geq</math> 100,000 TPY CO<sub>2</sub>e and <math>\geq</math> 100/250 TPY mass basis</p>	<p>Source is subject to PSD for another regulated pollutant and net GHG emissions increase is <math>\geq</math> 75,000 tpy CO<sub>2</sub>e and greater than zero TPY mass basis</p> <p><b>or</b></p> <p>existing source has GHG PTE <math>\geq</math> 100,000 TPY CO<sub>2</sub>e and <math>\geq</math> 100/250 TPY mass basis and net emissions GHG increase is <math>\geq</math> 75,000 TPY CO<sub>2</sub>e and greater than zero TPY mass basis</p>	<p>Actual or potential emissions of GHGs from the modification is <math>\geq</math> 100,000 TPY CO<sub>2</sub>e and <math>\geq</math> 100/250 TPY mass basis.</p> <p>Minor PSD sources cannot net out of PSD review.</p>	<p>The source is subject to PSD permitting for GHG emissions and other regulated pollutants that are significant. In the application include GHG emissions calculations and supporting documents, report CO<sub>2</sub>e and GHG emissions in Table 2-P, complete a GHG BACT determination, and include the TPY CO<sub>2</sub>e and GHG mass emissions in the public notice.</p> <p><b>Note:</b> If a minor source permit is issued after January 2, 2011, but before July 1, 2011, and construction has not commenced by July 1, 2011, the permit must be cancelled, reopened, or an additional PSD permitting action taken, if the approved change/construction would trigger GHG PSD after July 1, 2011.</p>

**Additional Information:****Sources for Calculating GHG Emissions:**

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at <http://www.epa.gov/ttn/chief/ap42/index.html>
- EPA's Internet emission factor database WebFIRE at <http://cfpub.epa.gov/webfire/>
- Subparts C through UU of 40 CFR 98 Mandatory Green House Gas Reporting except that tons should be reported in short tons rather than in metric tons for the purpose of PSD and TV applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at <http://www.epa.gov/nsr/ghgresources.html>:
  - ENERGY STAR Industrial Sector Energy Guides and Plant Energy Performance Indicators (benchmarks) <http://www.energystar.gov>;
  - US EPA National Greenhouse Gas Inventory, <http://epa.gov/climatechange/emissions/usinventoryreport.html>;
  - EPA's Climate Leaders, <http://www.epa.gov/climateleaders/index.html>
  - EPA Voluntary Partnerships of GHG Reductions that include the landfill methane outreach program, the CHP partnership program, the Green Power Partnership, the Coalbed Methane Outreach program, the Natural Gas STAR program, and the Voluntary Aluminum Industrial Partnership.
  - SF Emission Reduction Partnership for the Magnesium Industry <http://www.epa.gov/highwp/magnesium-sf6/index.html>
  - PFC Reduction/Climate Partnership for the Semiconductor Industry <http://www.epa.gov/highwp/semiconductor-pfc/index.html>

**Global Warming Potentials (GWP):**

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. Please note that sources not subject to 40 CFR 98 and/or 20.2.300 NMAC may still be subject to the GHG PSD and/or TV permitting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO<sub>2</sub> over a specified time period.

**"Greenhouse gas"** for the purpose of this part is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. **(20.2.70.7.O NMAC, 20.2.74.7.Y NMAC)**. You may also find GHGs defined in 40 CFR 86.1818-12(a).

**Short Tons:**

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.

1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

**EPA's GHG Tailoring Rule:**

To review EPA's final GHG Tailoring rule and pre-ambles, See "Final GHG Tailoring Rule dated May 13, 2010 located on EPA's NSR Regulations Webpage or Federal Register June 3, 2010 Volume 75, No. 106 <http://www.epa.gov/nsr/actions.html>

**EPA Permitting Guidance:**

EPA's Permitting Guidance for GHG and other GHG information can be found on EPA's NSR Clear Air Act Permitting for Greenhouse Gases webpage.

<http://www.epa.gov/nsr/ghgpermitting.html>

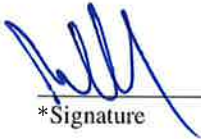
## Section 23 Certification

Company Name: Consolidated Asset Management Services (New Mexico), LLC

I, Roger Schnabel, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this 30 day of April, 2015, upon my oath or affirmation, before a notary of the State of

New Mexico

  
\*Signature

30-Apr-2015

Date

Roger L. Schnabel

Printed Name

Plant Manager

Title

Scribed and sworn before me on this 30<sup>th</sup> day of April, 2015.

My authorization as a notary of the State of New Mexico expires on the

7<sup>th</sup> day of August, 2016.

  
Notary's Signature

4/30/15  
Date

Daniela Grajeda

Notary's Printed Name

\*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.